ALLOCATION HEARING EXHIBIT 6034

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May 31, 1996

Dr. James H. Billington
Librarian of Congress
Library of Congress
Washington DC

Re: Copyright Arbitration Royalty Panel
Cable Royalties for the Years 1990-92

Dear Dr. Billington:

Pursuant to §251.53 of the Copyright Arbitration Royalty Panel Rules and Procedures the Copyright Arbitration Royalty Panel presents its majority report signed by Mel R. Jiganti, Chairperson and Ronald P. Wertheim, Arbitrator. Also attached is the dissent signed by John B. Farmakides, Arbitrator.

I hereby certify that the record, to my knowledge, is in accordance with the attached docket. As chairperson of this Panel, I am directing the Copyright Office to deliver a copy of this determination to all parties participating in the proceeding.

The entire Panel wishes to express its appreciation to the Library of Congress and its most accommodating personnel for their cooperation in producing this report.

Sincerely,

Mel R. Jiganti, Chairperson

MRJ/cbs

I.

BACKGROUND

Pursuant to Section 111(d)(3) of the Copyright Act, as amended,[1] this Copyright Arbitration Royalty Panel ("the Panel") was appointed to distribute approximately $500 million in royalty fees paid in the years 1990-1992 by cable systems for the benefit of copyright holders. The cable systems paid this "compulsory" licensing fee for retransmitting "distant signals" of "non-network" television programs. The shorthand generic term "distant signal" is used to describe those three concepts. Those terms will be explained.

There are three interrelated components in the television industry:

1. Cable Systems - Cable systems retransmit the distant signals and pay compulsory license fees to the Copyright Office. Cable systems deliver the familiar array of cable channels to their subscribers for a monthly fee. Cable systems do not produce their own programs. The programming they deliver comes from two sources: (1) broadcast stations; and (2) cable networks. Cable systems receive approximately 95% of their revenues from subscribers.
2. Broadcast Stations - These stations deliver the distant signals which cable systems retransmit.

These are the over-the-air television stations and consist of four broad categories that are significant in these proceedings: (1) the network stations, CBS, NBC and ABC, which operate through their local affiliates; (2) independent television stations which include the three original superstations, WTBS, WGN and WWOR, four other superstations (superstations deliver their signal by satellite), and all other independent television broadcast stations; (3) public broadcasting stations; and (4) Canadians (the Mexicans are not a party to this proceeding). Cable systems have a right to retransmit all of these broadcast signals to their subscribers. For the exercise of that right, they must pay a "compulsory" licensing fee, i.e., a fee mandated by Congress, for the non-network distant signals they retransmit. Broadcast stations receive their revenues from advertising. There are approximately 1500 broadcast stations in the United States.

3. Cable Networks - These are cable channels such as ESPN, TNT and CNN that sell their programming to cable systems. They do not provide distant signals and do not pay compulsory license fees. While cable networks are not directly involved,

cable networks are significant to an understanding of the television market. They are also significant because many of the aspects of the cable network market are analogous to the broadcast station market. Approximately 35-40% of the cable networks' revenues are obtained from affiliate fees paid by cable systems. The balance is obtained from advertisers.

For a rudimentary understanding of this industry, there are a few aspects that should be pointed out. When a cable system retransmits a broadcast station's programming, the Copyright Act requires that it take the entire signal from the broadcast station for six month periods. That means if a cable system wishes to broadcast the programming on WGN, it must accept the entire signal of WGN and all its programming and not merely the Chicago Bulls basketball games or a particular syndicated game or talk show. Equally significant, the cable system may not alter the signal that it retransmits. That is, it takes the entire signal, including commercials and everything else. It may not insert its own commercials or other material. The broadcast station therefore loses nothing by the retransmission by a cable system.

The compulsory licensing fee is paid by cable systems only for "non-network" "distant signals". There are reasons for this and it relates to the concept of copyright.

The copyright holder, such as the owner of a movie or sporting event, is entitled to be compensated for the publication of its work. The copyright holder negotiates with a network broadcast station. The copyright holder who negotiates with the networks, CBS, NBC, ABC, presumably agrees to have its work transmitted to the entire country because the networks, through their affiliates, cover the entire country. The same does not hold true for independent broadcast stations. Their broadcast area is considered by the Federal Communications Commission ("FCC") to be 35 miles from their station. Therefore, the copyright holder agrees to and is compensated for, having its work transmitted only in that limited area. To the extent that a cable system is beyond that area and retransmits the broadcast signal, the copyright holder is not being compensated. This occurs, for example, when a cable system in Princeton, Illinois, more than 35 miles from WGN, the broadcast station in Chicago, retransmits the WGN signal and is required to pay a compulsory royalty. The WGN signal, being retransmitted in Princeton, Illinois, is what is referred to as a "distant signal." The cable system is required to pay the compulsory license fee for that uncompensated retransmission of WGN beyond the 35 mile area. It is those distant fees that are being allocated to the copyright holders in these proceedings.

There is a significant qualification to the above and it concerns broadcast network stations. Network stations operate through their affiliates. Network affiliates broadcast not only the programming from the network but they also broadcast their own locally produced programming such as news and other programs in addition to the national network programming. Only "non-network" programming is compensable. To accommodate this situation, where the network affiliate broadcasts both compensated and uncompensated types of programming, Congress has adjusted the compulsory license fee to approximate the amount of locally produced programming at one quarter. The Princeton station in the above example would pay a compulsory license fee at a rate of 1.0 for imported independent stations and only 0.25 for the network station. These rates are prescribed by statute and are referred to as "distant signal equivalents." The only proper claimant in this proceeding would then be the holder of the copyright for the programming that was locally produced by the affiliate.

Before we become more specific in considering the law and the parties' contentions, the following statistics may give a better overview of the universe of royalty fees collected for non-network distant signals. There are over 13,000 cable systems. The cable systems are divided into categories by size and are referred to as Form 1, Form 2 and Form 3. Sixty-two percent of the systems, the smallest ones, are Form 1 but they contribute 0.3% of the total royalties collected. The 2,801 somewhat larger Form 2 stations contribute 2.6%. The remaining 2,236 largest systems, Form 3, contribute 97.2%. The vast majority of the evidence in this case will refer to Form 3 systems. Approximately 35% of the cable systems have 54 or more channels and 60% have between 30 and 53 channels. The remaining 5% have less than 30 channels. In the second half of 1992, 2,242 cable systems carried approximately 3.29 distant signals each, for a total of 7,377 distant signals. The following chart lists the sources of those distant signals:

	Instances of Carriage	
	1992	
	Number	%
Original Superstations	3,787	51.3%
WTBS	2,086	28.3
WGN	1,234	16.7
WWOR	467	6.3
Other Superstations	276	3.7%
WPIX	133	1.8
WSBK	84	1.1
KTLA	32	0.4
KTVT	27	0.4
All Superstations	4,063	55.1%
Other Independents	1,131	15.3%
Network Affiliates	1,559	21.1
Educational	533	7.2
Canadian	89	1.2
Mexican	2	0.0

All other signals	3,314	44.9%
Total	7,377	100.0%
Number of Systems	2,242[2]	
Signals per System	3.29	

The basic royalties collected from the distant signals are as follows:

The Source of Basic Royalties by Type of Distant Signal

	Basic Royalties 1992	
	Amount	%
Original Superstations	$50,893,371	75.0%
WTBS	30,501,138	45.0
WGN	13,872,980	20.4
WWOR	6,519,253	9.6
Other Superstations	3,431,850	5.1%
WPIX	1,669,761	2.5
WSBK	1,218,855	1.8
KTLA	386,867	0.6
KTVT	156,367	0.2
All Superstations	**54,325,221**	**80.1%**
Other Independents	8,137,902	12.0%
Network Affiliates	2,615,204	3.9
Educational	1,423,933	2.1
Canadian	1,337,176	2.0
Mexican	3,169	0.0
All other signals	**$13,517,384**	**19.9%**
Total	$67,842,605	100.0%

While superstations dominate the carriage of distant signals and the revenues generated, another statistic gives a relationship between the distant signal market and the cable network market. In 1992, cable systems paid $185 million in compulsory license fees[3] for the carriage of approximately 750 distant signals. By contrast, 15 cable networks were paid fees of $1.454 billion by cable systems.[4] As one witness testified, while the cable royalties dollar amount is large, it is a small percentage of program revenues and a small percentage of what drives the decisions of cable system programmers.[5]

II.

THE CLAIMANTS

There are approximately 600 claimants. They have traditionally divided themselves into six distinct groups. In this proceeding, referred to as a Phase I proceeding, the Panel will allocate a percentage of the fund to each of these groups. It will then be the task of the individual groups to divide their share of the total fund among each of the individual claimants in their group. That is referred to as Phase II. While there have been five contested proceedings since 1978 involving the Phase I aspect, with a single exception, the parties have been able to agree on the allocations to the individual claimants in the Phase II aspect.

The following are the Phase I program category definitions, as stipulated by the parties, with some commentary by the Panel in brackets:

> "Program Suppliers." [sometimes referred to as MPAA and Syndicated or generically as Syndicated] Syndicated series, specials and movies, other than Devotional Claimants programs as defined below. Syndicated series and specials are defined as including (1) programs licensed to and broadcast by at least one U.S. commercial television station during the calendar year in question; (2) programs produced

by or for a broadcast station that are broadcast by two or more U.S. television stations during the calendar year in question; and (3) programs produced by or for a U.S. commercial television station that are comprised predominantly of syndicated elements, such as music video shows, cartoon shows, "PM Magazine," and locally hosted movie shows. [Syndication refers to selling programming on a market-by-market basis to broadcast television stations in the United States. "Off-network" syndication refers to programming syndicated after having first appeared on a network. "Cheers" and "Roseanne" are examples. "First run" syndication refers to programs first appearing in syndication, such as talk and game shows.[6]]

"Joint Sports." [sometimes referred to as JSC] Live telecasts of professional and college team sports broadcast by U.S. and Canadian television stations, except for programs coming within the Canadian Claimants category as defined below.

"Commercial Television." [sometimes referred to as National Association of Broadcasters ("NAB") or "local" or "news and public affairs" or "station produced"] Programs produced by or for a U.S.

commercial television station and broadcast only by that one station during the calendar year in question and not coming within the exception described in subpart (3) of the "Program Suppliers" definition.

"Public Broadcasting."[sometimes referred to as "public television," "PTV," or "non-commercial"] All programs broadcast on U.S. noncommercial educational television stations.

"Devotional Claimants." Syndicated programs of a primarily religious theme, not limited to those produced by or for religious institutions.

"Canadian Claimants." All programs broadcast on Canadian television stations except (1) live telecasts of Major League Baseball, National Hockey League, and U.S. college team sports; and (2) other programs owned by U.S. copyright owners.

III.

CHRONOLOGY

The compulsory license fee, paid for retransmission of distant signals, is payable semi-annually by each cable operator to the Copyright Office. It is then distributed on an annual basis to the copyright owners.

Initially, the Copyright Royalty Tribunal ("Tribunal") was established as an independent agency in the Legislative Branch to conduct the necessary proceedings for distributing the royalties collected. This procedure was changed by the Copyright Royalty Tribunal Reform Act.[7] The Act abolished the Tribunal and reassigned its functions to ad hoc Copyright Arbitration Royalty Panels, which are convened and supported by the Librarian of Congress ("Librarian") and the Register of Copyrights ("Copyright Office").

The compulsory license was continued, and, as before, claimants to the annual royalty fund were to negotiate among themselves and to settle on a pro rata share. If a stipulated settlement was not achieved, the Librarian was authorized to determine whether a dispute among the claimants existed and, if so, to convene a Copyright Arbitration Royalty Panel to resolve it.

At the time that Congress was considering the change to the use of Panels, a proceeding to distribute the cable royalties collected in 1990 had already begun. In light of the imminent passage of the 1993 Act to abolish it, the

Tribunal formally suspended that proceeding. Later, during the initial stages of rule-making on regulations to govern the new Panel proceedings, the Copyright Office determined that matters left pending at the Tribunal would not be taken up where they had been left off, but would have to begin anew.[8] Following this development, the parties agreed to restart the 1990 proceeding only after the final rules and regulations for the Copyright Arbitration Royalty Panels had been issued.

The final rules governing the new Panels were published on December 7, 1994.[9] By Notice issued on December 8, 1994,[10] the Copyright Office publicly inquired as to whether a controversy existed for distribution of the 1990 fund. In addition, in an effort to reduce the existing backlog of potential royalty fund proceedings, the Office also inquired as to whether the 1990 proceeding should be consolidated with other cable royalty funds collected in subsequent years.

The Copyright Office found that while the consolidation of three funds represented an unprecedented distribution, it was both manageable and cost effective. In order to reduce the existing backlog, it was found that the 1991 and the 1992 cable royalty distributions should be consolidated with the 1990 proceeding. Accordingly, on March 21, 1995, the Copyright Office issued a "Notice on Consolidation of Proceedings, Request for Notices of Intent to Participate, and Precontroversy Discovery Schedule. Distribution of 1990, 1991, and 1992 Cable Royalty Funds."[11] The notice consolidated the proceedings and set out a schedule, providing for the filing of direct testimony, for the completion of a precontroversy discovery period, and for the initiation of the 180-day arbitration period on November 17, 1995.

Six parties indicated their intent to participate and to file direct cases: Program Suppliers, Joint Sports Claimants, the National Association of Broadcasters, the Public Broadcasting Service, the Devotional Claimants, and the Canadian Claimants. National Public Radio and the Music Claimants entered into settlements with the other parties and withdrew from the case.

In August, 1995, the parties exchanged their written direct testimony and commenced discovery. A joint request of the parties to delay the arbitration proceeding to December 29, 1995, was granted in part by the Office and an Order issued on November 13, 1995, approving a delay to December 4, 1995.

On November 28, 1995, the Librarian declared the existence of a "Phase I" controversy relating to the distribution of cable royalty fees paid for the years 1990, 1991 and 1992,[12] and named three members to a Panel to resolve it.[13] The proceeding commenced on December 4, 1995 and was scheduled to conclude by June 1, 1996, the statutory due date by which the arbitrators were to make their report to the Librarian.[14]

On January 30, 1996, the Panel entered an Order extending the due dates for some of the claimants' filings while retaining June 1, 1996, as the final date for the Panel's report.

On February 2, 1996, the direct cases of the six claimants were concluded. On February 23, 1996, by joint agreement, the parties filed a "Stipulation of the Parties on the Issues of Program Categorization and Scope of Claims" relating to "the extent to which Phase I claims are being prosecuted by fewer than all of the claimants whose programs are included within the Phase I program category."[15] The parties defined the categories and urged the Panel to apply the same procedures and approach as used earlier by the Tribunal.

Hearings on the rebuttal cases commenced on March 4, 1996, and concluded on March 22, 1996. On March 29, 1996, the Record was closed. The parties filed Proposed Findings of Fact and Conclusions of Law on April 12, 1996. Reply Findings were filed on April 26, 1996.

IV.

APPLICABLE LAW

The Copyright Act contains but a single sentence to guide the Panel in its ultimate distribution decision:

> The arbitration panels shall act on the basis of a fully documented written record, prior decisions of the Copyright Royalty Tribunal, prior copyright arbitration panel determinations, and rulings by the Librarian of Congress under section 801(c).[16]

This was intentional. The House Report accompanying the statute noted:

> The Committee recognizes that the bill does not include specific provisions to guide the [Tribunal or Panel] in determining the appropriate division among competing copyright owners of the royalty fees collected from cable systems under Section 111. The Committee concluded that it would not be appropriate to specify particular, limiting standards for distribution. Rather, the Committee believes that the [Tribunal or Panel] should consider all pertinent data and considerations presented by the claimants.[17]

As already noted, there have been a number of proceedings convened for the purpose of distributing copyright royalties since the advent of mandatory licenses in 1978. In addition, there have been a number of appeals of the Tribunal's awards over the years. Given the statute's direction that this Panel should act, inter alia, on the basis of the prior decisions of the Copyright Royalty Tribunal, those decisions, together with the appellate opinions reviewing them, have provided some guidance to us.

In the 1978 proceeding, the Tribunal considered the above-quoted language and found it meant that the Tribunal "should not confine itself to a single consideration, but must instead take into account all pertinent data, facts and considerations."[18] The Tribunal also found that "no single formula advocated by any party succeeds in taking account of all pertinent data and consideration [sic]."[19] In that first distribution proceeding, the Tribunal announced certain governing principles which have been largely adhered to ever since. Three primary factors identified by that Tribunal were:

(1) the harm caused to copyright owners by secondary transmissions of copyrighted works by cable systems;

(2) the benefit derived by cable systems from the secondary transmissions of certain copyrighted works; and

(3) marketplace value of the works transmitted.

In addition, two secondary factors were identified:

(1) quality of copyrighted program material; and

(2) time-related considerations.[20]

The Tribunal's adoption of these five criteria was subsequently approved by the Court of Appeals as "a reasonable interpretation of legislation by the agency charged by Congress with its enforcement."[21]

The secondary criteria, time and quality, were given less and less weight by the Tribunal in later proceedings as their deficiencies as measures of distribution became apparent.[22]

As early as 1978, the Tribunal gave "time-related" considerations "very limited weight" compared to the other factors,[23] and also found that "an allocation of royalties mainly based on the amount of time occupied by particular categories of programming would ignore market considerations and produce a distorted value of programming."[24]

The Tribunal in the 1978 distribution proceeding similarly noted "the problems inherent in judging or measuring quality" and it "was not able to accord any significant weight to this factor in assessing most claims."[25] In the 1989 proceeding the Tribunal essentially abandoned the "quality" factor. It explained:

> Quality has been a secondary criterion in the Tribunal's allocation decisions since the first proceeding. Evidence on quality has been received, but ultimately no distribution decision has been made on quality. The reason should be clear. It is a subjective evaluation with serious First Amendment implications.
>
> * * *
>
> In this proceeding and in future proceedings, quality will no longer be a criterion in the Tribunal's distribution because of its conflict with the First Amendment.[26]

In addition, the Tribunal has generally discounted the "harm" criterion from its consideration due to an inability to quantify the evidence submitted on this factor while, at the same time, recognizing its importance.[27] In 1978, the Tribunal concluded that "the harm caused to copyright owners by secondary transmissions of copyrighted works by cable systems is of material importance in the distribution of royalty fees."[28] The Tribunal further determined that "most claimants in varying degrees have sustained harm."[29] The Tribunal in the 1979 proceeding similarly noted that "[t]he record of this proceeding, including proposed findings of several parties, indicates that the 'harm' test is of limited utility in allocating royalty fees among categories of claimants."[30] Finally, the Tribunal most recently (1989), gave Program Suppliers and JSC (but not NAB or PTV) a "credit for harm" but noted that (with respect to Program Suppliers) "quantifiable evidence [of harm] is still lacking."[31]

Given this history, and taking into account the evidence and arguments regarding "harm" which have been presented in this proceeding, we have determined to make explicit what has been implicit since these royalty proceedings were first commenced. In creating the compulsory license scheme, Congress specifically recognized that harm occurs when distant signal are retransmitted without compensation. Experience has demonstrated the difficulty, if not impossibility, of quantifying this factor or of determining which claimants were "harmed" more than others by distant signal retransmissions. Consequently, we have concluded that "harm" should be taken as a given, and we will neither summarize nor address the claimants' arguments in this regard or attempt to grant or deny "credits" for a showing of harm. Instead, all claimants are deemed to have been equally harmed by virtue of their eligibility to make claim to a share of these royalties.

As opposed to the five factors delineated above, the Tribunal instead has consistently placed principal reliance on marketplace factors. In the 1978 proceeding, the Tribunal "decided that it was not the legislative intent of the Act to alter market valuation and return."[32] It "concluded that the allocation must take primary account of market factors in an effort to simulate market valuation."[33] The Tribunal similarly "concluded ... that particular attention should be paid to the benefit and marketplace value criteria."[34]

The courts of appeals have approved of the Tribunal's reliance upon the marketplace standard. In *NAB v. CRT (II)*, the court noted that the "Tribunal should rely, as it has in the past, on marketplace criteria ...."[35] Similarly, in *CBN v. CRT*, the court rejected a challenge to the cable operator survey, explaining:

> [G]iven Congress' evident intent to have the Tribunal operate as a substitute for direct negotiations (which were thought to be impractical) among cable operators and copyright owners, <u>see</u> House Report at 89, we find the Tribunal's receptiveness to evidence simulating the commercial attitudes of the "buyers" in this supplanted marketplace to be more than reasonable.[36]

In considering appeals from the 1980 proceeding, the Court of Appeals addressed whether a standard of "changed circumstances" should govern the Tribunal's proceedings. The Court found:

> [I]t would be improper, as a matter of law, for the Tribunal to rely solely upon a standard of "changed circumstances." ... At the same time, it is entirely appropriate for the Tribunal to employ, as one of its analytical factors, the determination whether circumstances have changed in the course of the ensuing twelve months, inasmuch as that conclusion will obviously be relevant to the question whether an award should differ from the prior year's award. But if a claimant presents evidence tending to show that past conclusions were incorrect, the Tribunal should either conclude, after evaluation, that the new evidence is unpersuasive or, if the evidence is persuasive and stands unrebutted, adjust the award in accordance with that evidence.[37]

* * * *

After reviewing the statute, the Tribunal decisions, the courts of appeals' decisions, and the evidence and arguments before us in this proceeding, we have concluded that "market value" is the only logical and legal touchstone. Cable systems receive their programming from two sources: cable networks and broadcast stations. Cable systems negotiate with cable networks in an open market for programming. Cable systems do not negotiate with broadcast stations because they have a statutory right to retransmit the broadcast station programming and, in exchange for that right, they pay a compulsory licensing fee called a royalty. Conceptually, the factual question we must resolve is, what would the cable system have had to pay and be willing to spend for the broadcast station programming if, in fact, it had been required to negotiate with the broadcast station in an open market.

To place that conceptual issue in a workable framework, we must construct what has been called in the past -- and what we will call -- a "simulated market." This simulated market looks a great deal like the cable network market, including, most significantly, the fact that cable systems purchase not merely a program, but an entire signal, such as ESPN. Where the simulated market diverges from the compulsory license system, and what we must construct, is the negotiations between the cable system and the broadcast stations because, in fact, none exist. Further, we must hypothesize a situation whereby the cable system negotiates not for a channel, such as WTBS or TNT, but rather for an entire program category, such as sports programming, movies or public broadcasting programming, on a proportional basis. Ultimately, the question is, what would the cable system operators have had to pay in an open market for the sports, movies and other categories of programming that existed in the years 1990 through 1992?

Much of the evidence in this proceeding consisted of statistics and economic analyses providing the seeming comfort of categorical numbers. In the end, however, there is no mathematical or mechanical solution to the problem. Just as judges or jurors decide the value of the benefit of the bargain in a breach of contract case, or the value of a trademark in a trademark infringement case, or the value of pain and suffering in an injury case, we must determine the market value of the six categories of programming at issue here. The simulated market is, by definition, mythical and imperfect. So too must be our assessment.

Before moving on to a recitation of the evidence introduced by each claimant group, and their respective arguments in support of their own position and in opposition to the other claimants' positions, we must comment on the sheer mass of materials we have before us. This proceeding has generated several hundred pages of preprinted testimony, well over 300 hours of hearings, and a transcript over 12,000 pages. The parties have each submitted proposed findings of fact and conclusions of law as well as "reply" findings and conclusions. The briefs alone run to hundreds of pages.

Given this quantity of material, it would be impossible to reiterate every item of evidence, every argument and every response thereto. Nonetheless, we have made every effort to present a fair and comprehensive summary of the record that is now before us. All of the briefs have been read and reread with great care and we have given serious consideration to each party's claim, evidence, and arguments. We have attempted to fairly summarize and respond to the major arguments presented in each party's proposed conclusions of law and the replies thereto.

V.

ANALYSIS AND AWARD

A. METHOD OF PRESENTATION

In this section of the opinion, the Panel will present facts in addition to those provided in the "Background" section that are relevant to the Panel's determination. The centerpiece of the Program Suppliers' case is the data from the Nielsen survey. They also place significance reliance on the Besen study. The centerpiece of the cases presented by JSC, NAB, PBS and the Devotionals are the Bortz surveys. We will present all relevant facts as to these major surveys that are common to most claimants and make observations regarding the significance of each of them. Following that, we will analyze each claim in light of those surveys and the other significant evidence the parties have presented. Finally, after considering each claimant's arguments as to their case (together with the other claimants' arguments in opposition), we will make an award to each claimant. Although there are three years involved, we will make one unified award for the period.

In addition to the basic fund, there are also the Syndex and 3.75 funds that we will briefly comment on at the end of this report. The Canadians settled their claims for 1990 and therefore only make claims for 1991 and 1992.

B. THE NIELSEN STUDIES AS EVIDENCE OF MARKET VALUE

Paul Lindstrom testified as a witness for the Program Suppliers. He is Vice President and Product Manager of Nielsen Home Video Index (NHI).[38] Nielsen is an independent measuring service designed to provide both buyer and seller with unbiased estimates of viewing behavior.[39] NHI was established in 1980 to measure all non-traditional broadcast uses of television including cable, pay, VCR, and video games.[40] Nielsen ratings provide an estimate of the television audience size and are a barometer of viewing habits.[41] In 1992, advertisers spent approximately $30 billion on television advertising time.[42] Advertising rates are calculated on the basis of Nielsen ratings.[43]

Nielsen uses two basic data collection instruments: meters and diaries.[44] The diary is used for recording both the channel the television set is tuned to and viewer demographic information.[45] There are over 200,000 cable households in the diary study.[46] The Nielsen People Meter (the meter) is described by Lindstrom as the heart of the system used to measure viewing on broadcast networks, national syndicated programs and 32 cable networks.[47] The meter is smaller than a cigar box and is placed on each television in the household. The accompanying control unit makes it possible to make electronic entries from anywhere in the room.[48] Each member of the sample household is assigned a personal viewing button. Red and green lights by each button assist in showing who is watching and who is not watching when the television is on. Additional buttons are labeled for visitors.[49] Other buttons are used to record the age and sex of the viewer.[50] All of the data is stored in the in-home metering system until it is retrieved by Nielsen's computers. The recorded data includes when the set is turned on, which channel is viewed, when the channel is changed, and when the set is off, in addition to the demographic information.[51] This information is processed daily for release to the industry.[52]

The Nielsen rating is a statistical estimate of the number of homes tuned to a program.[53] For example, a 15 rating for a network television program means that 15% of the 93 million U.S. television homes are estimated to be tuned into the program.[54]

For the meter sample, scientific sampling procedures were used to randomly select housing units from the U.S. Census Bureau's count of all housing units in the nation.[55] The meter sample consists of approximately 4,000 metered television households. It is dispersed geographically to facilitate territorial and regional reporting, includes non-telephone as well as telephone households, and both urban and rural households.[56]

The meter sample is a multi-staged, stratified area, probability sample of U.S. housing units, with each housing unit having an equal chance of selection. In addition, the sample design includes several levels of stratification and uses selection procedures to optimize the desired distribution of the sample at each stage of selection.[57]

Approximately 2,400 (or 60%) of the 4,000 metered households are cable households.[58] Within the last year, Nielsen has decided to increase the sample size from 4,000 to 5,000 households.[59] Each metered home is measured every minute of the day. For this study, simply turning on the television set starts the collection of data.[60] Nielsen itself recommends using the meter as opposed to the diary because the meter operates 24 hours a day, and because it is electronic and does not suffer from any non-response bias.[61]

The 4,000 household sample size is used because the clients feel that 4,000 is an adequate sample size and there must be a trade-off between sample size and cost considerations. As Lindstrom explained, the basic idea rests on the fact that if 20% of all U.S. homes were watching a program, and Nielsen picked 1,000 different samples of the 4,000 households to measure the viewing of that program, ten virtually all of the samples, 995 of the 1,000, would have ratings ranging between 18.2 and 21.8 or ±1.8 rating points of "the real thing." This is adequate for most practical purposes.[62] The Program Suppliers' witnesses acknowledged there is skepticism in the industry about whether the sample is big enough.[63]

Of the 4,000 households sampled, only about 3,500 meters are in use on any typical day because of various types of problems.[64] Only 60% of those 4,000 are cable subscribers; the actual daily sample for the meter study of cable subscribers is 2,100.[65] The meter response rate was about 45%.[66] Lindstrom agreed that it is possible that just 10 households in the Nielsen study could account for 5% of the total viewing minutes.[67]

Four times a year Nielsen's local market service measures all 200+ markets in the country individually. These are called the "sweep" periods.[68] In order to make the viewing more representative, Nielsen began using the meter because it allows a 12 month measurement.[69]

The results reported by Nielsen for distant signal viewing, in percentages, are as follows[70]:

	Total	Local	Movies/ Syndicat-ed	Devo-tional	Sports	Other	Non-commer-cial
'90 Sweeps	100	7	83	1	6	*	4
'91 Sweeps	100	7	82	*	7	1	3
'91 Full Yr.	100	7	83	*	7	*	2
'92 Sweeps	100	8	80	1	6	1	4
'92 Full Yr.	100	8	80	1	7	*	4

Diary-based studies were done for the Program Suppliers for the years 1989, 1991 and 1992.[71] For the years 1990-92 a people meter study was also used.[72]

Lindstrom acknowledged that he could not determine the relative value of sports (or other program categories) simply by looking at the Nielsen study.[73] He also said he had "no way of knowing" whether cable operators would have allocated the royalty pool in accordance with the results of his viewing study, or whether sports programming is worth more to cable operators than the 6% or 7% reflected in the Nielsen study.[74]

Marsha Kessler, a witness for the Program Suppliers, is employed by the Motion Picture Association of America as Vice President, Copyright Royalty Collection and Distribution. Kessler testified that the meter study presented in this proceeding is based on the same television households selected by Nielsen for its national ratings service.[75] The study began with Nielsen selecting a sample of stations from all U.S. stations which were carried as distant signals during the year in question. After selecting the sample of stations, Nielsen categorized, pursuant to Program Suppliers' direction, the non-network programming carried by each sample station into one of the claimant categories and measured the viewing on the stations.[76] Local viewing was excluded from the data base so that the final reports measure only distant cable household viewing of non-network programming.[77]

Robert P. Sieber, the Vice President of Audience Development for Turner Entertainment Networks (TEN),[78] was presented as a witness by the Program Suppliers. TEN owns and operates both cable networks (the Turner Network Television (TNT), the Cartoon Network, Turner Classic Movies) and an Atlanta independent broadcasting station, WTBS, the most viewed distant signal in the United States.[79] Sieber's primary responsibilities at TEN include programming research. That research provided support for sales of network services to cable systems and advertising sales and promotion. Under Sieber's direction, WTBS became a leader in the development of cable television audience measurement, including the first Nielsen national metered ratings for basic cable networks.[80] This was done for the WTBS superstation in 1981 and for CNN in 1982.[81] Sieber also developed the first daily, overnight national ratings for basic cable.[82]

Sieber explained that ratings measure how well each network attracts viewers from all the subscribers that receive it. Ratings are defined as the ratio of the average audience watching the network to the total number of subscribers who can receive it.[83] Lower ratings equate to a lower subscriber involvement and more limited appeal. Cable operators are much more willing to carry the more heavily watched, higher rated services.[84]

Ratings have become more important to cable operators as channel capacity, compared to the number of programming options, has become more limited.[85] Cable operators may have been willing to try new channels, regardless of their ratings, when capacity was freely available.[86] Unless a channel attracts a fair amount of viewing, it will grow slowly, if at all. Over time, the most heavily watched channels are the ones that are carried by the largest number of systems.[87]

Sieber testified that, as recently as 1980, none of the cable networks or superstations were measured by Nielsen's national metered panel. By 1990, 19 basic cable networks had contracts with Nielsen for national data, with most stations receiving daily "overnight" measurements, in addition to published monthly and quarterly reports.[88] Currently, 32 basic cable networks subscribe to regular, national measurement.[89] Approximately 400 multiple system operators and individual systems subscribe to data including cable audience profile reports with local estimates of cable network performance, diary and meter based special tabulations of local data and national ratings for cable networks.[90] Most of the operators of multiple systems and individual systems receive national ratings data from cable networks themselves.[91]

Sieber acknowledged that in 1990 and 1991, the only distant signal station for which Nielsen regularly reported a national rating was WTBS.[92] In 1992, Nielsen reported a national rating only for WTBS and WGN.[93] This is because money is needed to get reports; a certain amount of national penetration is necessary before ratings can be produced; and ratings must be sufficiently high for Nielsen to report.[94]

For a national cable network to succeed, according to Sieber, it is important to both advertisers and cable systems that the network's programming perform well across individual markets and regions.[95] The challenge is for the programmers to find programming with universal appeal.[96] National advertisers are adverse to clumps of viewing, peaks and valleys on a market-by-market basis.[97] National ratings establish levels of expectation.[98] National advertisers prefer programs with uniform geographic appeal.[99] Similarly, cable systems expect cable networks to perform as well in their local market as they do nationally.[100]

Sieber explained that while attitudinal studies like the Bortz survey tell us the "why" of subscriber behavior, the ratings tell what the behavior is in some detail.[101] Many new channels, which have been offered based on stated subscriber preference, nonetheless fail.[102] Those that have lasted and prospered are those that have received the largest ratings and those that have attracted the largest audiences.[103]

It is Sieber's opinion that viewing is very important and it is the value that is most important to him as a programmer. The reason that WTBS has been so successful is that it has a tremendously broad distribution and it is watched more than any other distant signal.[104] From Sieber's perspective, there is nothing more important than consumer viewing because it goes to the heart of the situation.[105] It is Sieber's task to develop the biggest audience. To do this, he estimates the ratings of all programs that TEN is about to acquire.[106]

At one time, WTBS had difficulty selling advertising.[107] Sieber ascribed the reason for this to the fact that, until 1981, WTBS did not have ratings sufficient to prove that it was developing the audience advertisers wanted.[108] In addition, WTBS was not considered a national service and there was a limited penetration nationally.[109] National penetration is still the problem because advertisers have the alternative of the broadcast networks.[110] While WTBS reaches 95% of 60 million cable households, it does not reach a sufficient percentage of the 95 million television households.[111] For a broadcast station carried as a distant signal to a much smaller percentage of the nation's cable households, a national advertiser is not likely to buy advertising.[112]

Sieber further testified that advertising produces 90% of the revenue for WTBS.[113] The other sources of revenue are copyright reimbursement fees and some production revenue from programs produced by WTBS.[114] Sieber acknowledged that although sports had 5% of the viewing on WTBS, he could not say that sports accounted for just 5% of the value of WTBS to cable operators or cable subscribers. Nor could he say that in an open marketplace, in the absence of compulsory licenses, cable operators would make 5% of their payments for WTBS programming for the sports on WTBS. Sieber also acknowledged that there were many other factors that had to be considered besides viewing.[115]

Criticisms of Nielsen Survey

Dr. Peter V. Miller, a professor of communications studies and journalism at Northwestern University in Evanston, Illinois, testified for JSC.[116] Dr. Miller disagreed with Lindstrom's implicit suggestion that there is industry satisfaction with the people meter, and that the task of measuring is straightforward.[117] Dr. Miller testified there are significant, industry-recognized problems with the meter.[118] A major concern is whether the meter sample is representative of the nation's television households.[119] Although there were significant problems with the diary as well, it cannot be said that the meter system is a better technique.[120]

The meter was controversial and some major clients were opposed to it.[121] They found it wanting in several areas. The fact that Nielsen has a monopoly does not imply satisfaction.[122] With respect to the diary study, there are serious questions of non-response and response error.[123] Despite these problems, the diary data has certain advantages. One advantage is that the diary data is obtained from 200,000 households per year.[124] In addition, the participants are included in the survey for only a week.[125]

Dr. Miller also disagreed with Lindstrom's underlying assumption that, since the television industry relies on Nielsen data in making decisions about purchase and sale of advertising and programming, the meter survey is a good source of information.[126] Dr. Miller points out that the data presented to this Panel by Lindstrom is unlike the data Nielsen normally supplies.[127] Further, cable operators' valuation decisions are quite different from the valuation decisions the television industry makes in reliance on viewing data.[128] Viewing data is relied on by the industry in connection with the sale of advertising time.[129] Advertisers are concerned with who will see their advertisements. However, the cable operators do not sell advertising and they are concerned only with what will help them attract and retain subscribers.[130]

Other witnesses also criticized the Nielsen viewing study. They included Dr. Michael Salinger, Associate Professor of Economics, Boston University School of Management, who testified that viewing data answer no questions about marketplace value.[131] Dr. David Scheffman, Professor of American Competitive Enterprise, Owen Graduate School of Management at Vanderbilt University, another economist, testified that "the Nielsen numbers are largely, if not entirely, irrelevant."[132] Cable operator Thomas Engel testified the amount of viewing to a signal has nothing to do with the value of the signal to the operator.[133]

Statistician Dr. William Fairley testified that you cannot rely solely on a Nielsen survey to get a good estimate of relative value.[134] Dr. Fairley also explained that non-response bias can be a serious problem in a statistical survey.[135] The rate of non-response for the Nielsen survey, which is in excess of 50% of those initially selected for the sample, creates significant problems of bias.[136] Drs. Miller and Debra Ringold testified that a non-response rate in excess of 50% is typically considered unacceptable in survey research.[137] Bortz testified that cable operators do not rely on any viewing measures, either ratings or the Bortz study, in making distant signal carriage decisions.[138] Tyrgve Myhren explained that the reason viewing of particular distant signals is not important is because a cable operator's goal is to design a channel lineup that has "something for everyone."[139]

Dr. Richard V. Ducey, a witness for NAB, compared certain quantitative evidence which had been introduced in the 1983 proceeding -- the Nielsen study and another entitled the ELRA cable subscriber survey.[140] The 1983 Nielsen figures showed that 7.24% of distant signal viewing was attributable to station produced programming.[141] The 1983 ELRA survey of 1,099 cable subscribers reported that the relative value cable subscribers assigned to station-produced programming was over twice as much, 17.1%.[142] By contrast, syndicated series had a much higher viewing percentage than the relative value assigned by cable subscribers (51.87% of viewing, compared to 15.8% of value).[143]

PARTIES' ARGUMENTS AS TO SIGNIFICANCE OF NIELSEN

The Program Suppliers contend that if an open market existed for distant signal programming, the Nielsen ratings would play a large role in negotiations between distant signals and the copyright owners, between distant signals and cable operators, and between distant signals and advertisers.[144] They emphasize that cable networks and distant signals rely on Nielsen viewing data for information about how subscribers use their programs and to buy attractive programming.[145] In response, other claimants note that the Nielsen data presented to this Panel is not "ratings" data.[146] Some claimants point out that tuning tonnage does not measure rating shares and is not even the same kind of information which is used in the very different broadcast television industry which is driven by advertising.[147] Cable operators, by contrast, are not permitted to sell advertising on distant signals. Lindstrom himself confirmed that one cannot determine "ratings" from the Nielsen data that was presented in this case.[148] Some claimants emphasize that the Nielsen ratings which are purchased by many multiple system operators and cable systems provide viewing data on cable network audiences; they do not report data on distant signals, where advertising cannot be sold.[149]

Program Suppliers contend the meter improves the information contained in the study.[150] They also point out that the Nielsen viewing results were stable for the years at issue, indicating that viewers' interest remained consistent over time.[151] They further note that there is no correlation between viewing and "tonnage," thus refuting the point that more programming necessarily leads to higher viewing. (Sports in 1992, for example, had a 1% share of broadcasting time yet a 7% share of viewing.)[152]

In summary, Program Suppliers argue substantial weight should be placed on the Nielsen results for two principal reasons: First, because Nielsen measures actual viewer behavior based on the actual distant signal choices available to subscribers; and second, in a simulated open market, the Nielsen data would be given significant weight in deciding value.[153] Significantly, Program Suppliers do not argue that this Panel's allocations should match precisely the Nielsen figures. Rather, their position is that while viewing "is not the only factor, ... it appears to be a very important factor closely connected with value."[154]

The other claimants contend reliance on the Nielsen data leads to absurd results. Examples include the fact that, according to the Nielsen survey, "infomercials" were as valuable as all the Chicago Bulls games, since both attracted about the same number of total viewing minutes.[155] Further, the old syndicated series of "Tom & Jerry," "Andy Griffith," and "Little House On The Prairie" together accounted for as many viewing minutes as all of the sports programming on all the distant signals.[156] Finally, the Nielsen survey indicated that syndicated series were more valuable than movies, and should, by themselves, receive half the entire royalty pool. Stated differently, the use of viewing shares to determine relative market value overcompensates Program Suppliers by hundreds of millions of dollars, at the expense of JSC, for programming that is cheaply available in the marketplace.[157] Other claimants contend the irrelevancy of viewing minutes to cable operators is illustrated by the fact that the Nielsen ratings are extraordinarily low for specialty channels such as CNN, Discovery, and Arts & Entertainment, channels for which cable operators pay substantial license fees.[158]

According to the Nielsen critics, the meter study was not an improvement on the "abandoned" diary study. The multitude of criticisms leveled against the meter (and some of the Program Suppliers' responses) include the following:

-- it gave undue credit to a handful of households;[159] (Program Suppliers respond that the diary sample is designed to give local market ratings and it is necessary to obtain a sufficient number of respondents in each market. National ratings do not present local market information and can be done with a much smaller sample.)[160]

-- measured tuning rather than viewing;[161] (Program Suppliers note the modern "channel surfing" phenomenon and claim tuning may be the only means to record the type of customized viewing that has become more prevalent today.)[162]

-- failed to identify which programs were actually broadcast at each time, sometimes attributing portions of a sporting event, for example, to the programming that was scheduled to follow the event;[163]

-- failed to measure either the benefits to cable operators from distant signal retransmission or the marketplace value of the retransmitted programming;[164]

-- failed to measure the reasons that people subscribe to cable, the reasons that people maintain their subscriptions, or the benefit of distant signal programming in terms of attracting and retaining subscribers;[165]

-- has an unacceptably high nonresponse rate;[166] (Program Suppliers respond by pointing out that the nonresponse rate used by the other claimants improperly combines the actual nonresponse rate with the number related to unusable meter information.[167] JSC replies that even a 45% nonresponse rate is well below the acceptable level.[168] In addition, Program Suppliers emphasize, nonresponse is a problem only if nonrespondents differ from respondents in materially important ways. Here, there was no showing of what underrepresentation occurred or whether it affected the relative shares.)[169]

-- made no distinction among differences in intensity of viewing;[170] and

-- was not designed to simulate a marketplace or to provide relative marketplace valuations.[171]

The Devotionals also contend that the Nielsen statistics are irrelevant to their claim because their stations carry no advertising.[172]

OBSERVATIONS CONCERNING THE NIELSEN SURVEY

There are two issues involving the Nielsen statistics. First is their accuracy in the sense of whether they represent the correct percentages of viewing in each of the categories. Second, if they do indeed accurately portray those statistics, what do those statistics indicate with respect to market value?

With regard to accuracy, the Nielsen critics say that diary method is superior to the meter because of the much larger number of households in the diary. We are inclined to believe that for a national survey our view is fairly summarized by Lindstrom's observation that the meter is adequate for most practical purposes. We are also unpersuaded that the criticisms involving miscategorization and nonresponse rate have any real measurable effect on the validity of the results. This is particularly so in light of the fact that none of the witnesses were able to articulate what effect, if any, these alleged problems had on the survey results.

Dr. Peter Miller, in testifying for the JSC, says the Nielsen figures should be looked at with some degree of caution.[173] He says the numbers could be biased in one direction or another but that this cannot be quantified[174] and that we should take those numbers with "a grain of salt."[175] We do accept those numbers in that vein. We see no need to engage in a lengthy discussion about the Nielsen methodology in light of the fact that we accept these numbers merely as a reference point and not as an absolute value. Also, in addition to being unable to quantify their various criticisms, the claimants who dispute the Nielsen survey's accuracy present no alternative evidence as to viewing.

The next question is, what do these numbers reveal about market value? Program Suppliers acknowledge that the Nielsen study does not measure value; rather, it measures tuning. Program Suppliers point out they did not ask Nielsen to interpret what the results meant, but left that to the other witnesses and the evidence.[176] Program Suppliers agree that the Nielsen figures are not the sole determinant of market value.

Certainly viewing is a significant factor in value. Cable networks and broadcast stations, which together provide all of the programming for cable systems, use Nielsen ratings in pricing their programs to cable systems and advertisers. Measured against these facts is the contention by the proponents of the Bortz surveys that while advertising is significant to those industries, it is not important to cable systems. Cable systems, they argue, care about attracting subscribers and viewing does not translate into subscribers. We find that argument of value but not totally persuasive. It is disingenuous to say that the cable system is interested only in attracting subscribers but is totally unconcerned with whether or not the subscriber, in fact, watches the programming. As was stated by Sieber, who testified for the Program Suppliers, cable system operators are more willing to carry the more heavily watched, higher rated services. Cable system operators receive Nielsen data in a variety of ways.

Proponents of the Bortz surveys say that the Nielsen statistics obviously are going to favor Program Suppliers because syndicated series and movies have, by far, most of the time in programming available on distant signal. To which the Program Suppliers reply, that is an indication of market value. We find that while this is true, we certainly cannot equate reruns of "Tom and Jerry," "Andy Griffith," and "Little House on the Prairie" as being equal in value to all the distant signal sports programming, as the viewing figures standing alone would indicate.

In conclusion, we accept the Nielsen data for what it purports to be, a survey of actual conduct with adequate accuracy for the larger claimant groups in particular. We cannot quantify the Nielsen statistics as evidence of market value other than to say that actual viewing is very significant when weighed with all other factors.

C. THE BORTZ SURVEYS AS EVIDENCE OF MARKET VALUE

Paul I. Bortz testified before the Panel on behalf of the JSC. Bortz is the President of Bortz & Company, Inc., an economic, financial and market consulting firm which serves clients in the media, sports and entertainment industries.[177]

The purpose of Bortz' testimony, as characterized by the witness, was to discuss the value that cable operators placed upon different types of distant signal non-network programming during the period 1989 to 1992.[178] He compared the methodology and results of a survey his company conducted in 1989 with a similar 1992 survey. In each of the two surveys, a random sample of nearly 200 Form 3 cable operators were asked to assess the relative value of the various types of non-network programming on the distant signals that they actually carried.[179] Specifically, the operators were asked to allocate a fixed dollar amount to each of the program categories.

Bortz explained that cable programming "carriage" decisions are made based on two primary determinants of value: (1) the ability to attract and retain subscribers; and (2) programming economics. The first factor is derived from the basic economic fact that cable television systems derive approximately two-thirds of their revenues directly from basic (and expanded basic) subscription fees.[180] As a result, the value that cable operators attach to most programming depends primarily on its ability to attract and retain subscribers. The second factor, programming economics, involves the per subscriber license fee which cable operators pay to cable networks for each subscriber to which the service is available and corresponding copyright fee.[181]

The Tribunal in the 1989 proceeding used the 1989 Bortz survey as "a key part" of its determination,[182] but criticized certain elements of the study. The 1992 Bortz study attempted to improve its methodology in response to the Tribunal's comments.[183] The Tribunal expressed concern regarding the qualifications of approximately 11% of the 1989 survey respondents and indicated uncertainty with respect to the involvement of the respondents in the program budgeting process.[184] In response to these concerns, the 1992 Bortz survey modified the initial respondent qualifying question to ensure that the respondent was the person "most responsible for programming decisions at the cable system."[185] The Tribunal also expressed a desire for enhanced programming definitions.[186] The 1992 Bortz survey modified the category definitions to conform more closely to the Tribunal's definitions and to attempt to further aid the respondents in distinguishing among the categories.[187] In response to the Tribunal's concern regarding the short time period allowed for the respondents to consider their allocations, the 1992 question was modified to attempt to ensure that respondents considered the question in a more formal manner by writing down the programming categories, and then think about their relative value and their estimates.[188] Bortz also testified that he believes responses to the survey "reflect dominant impressions of programming value formed by respondents in their ongoing decisionmaking processes...."[189]

Results of Survey

The Bortz survey respondents were asked which types of programming broadcast by the station were "most popular" with their subscribers. Their responses for 1989 and 1992 are contained in the following table:

DISTANT SIGNAL PROGRAMMING POPULARITY
AMONG SUBSCRIBERS: 1989-92

	1989	1992
Category	Percent Mentioned as "Most Popular"	Percent Mentioned as "Most Popular"
Live professional and college team sports	73.1%	76.2%
Movies	44.6	41.0
Syndicated shows, series and specials	30.1	23.4
News and public affairs programs	6.4	19.0
PBS and all other public television programming	1.1	7.3
Devotional and religious programming	1.0	2.1
Canadian programming	0.2	1.1
Other	5.6	7.9

Respondents were also asked if they used any distant signal programming in advertising and promotional efforts. Approximately 96% of the systems that promoted distant signal programming during 1992 featured sports (compared to 90% in

1989).[190] Movies declined from 73% in 1989 to 50% in 1992.[191] The respondents were also asked to rank the relative importance of the distant signal non-network programming types they feature in advertising/promotional campaigns. Sports was considered most important to feature by about two-thirds of the systems in both 1989 and 1992.[192]

As a final question, the cable operator respondents were asked to allocate a fixed program budget among the different categories of distant signal programming. Five to seven program categories were used, depending upon whether the respondent's cable system carried distant PTV or Canadian stations.[193] For 1992, the categories were:

Movies.

Live professional and college team sports.

Syndicated shows, series and specials distributed to more than one television station.

News and public affairs programs produced by or for any of the commercial stations listed, for broadcast only by that station.

Devotional and religious programming.

PBS and all other programming broadcast by the noncommercial station or stations carried.

All programming broadcast by the Canadian station or stations carried.[194]

The allocation question in 1992 read as follows:

4. Now, I would like you to estimate the <u>relative</u> value to your cable system of each type of programming actually broadcast by the stations I mentioned during 1992, other than any national network programming from ABC, CBS and NBC. That is, how much do you think each

such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers. We are only interested in U.S. commercial station(s) ________________, U.S. non-commercial station(s) ________________, and Canadian station(s)________________.

I'll read all the program types that were broadcast by these stations to give you a chance to think about them; please write the categories down as I am reading them. [READ PROGRAM TYPES IN ORDER OF RANDOM SEQUENCE NUMBER.) Assume you had a fixed dollar amount to spend in order to acquire all the non-network programming actually broadcast during 1992 by the stations I listed. What percentage, if any, of the fixed dollar amount would you spend for each type of programming? Please write down your estimates, and make sure they add to 100 percent.

What percentage, if any, of the fixed dollar amount would you spend on (READ FIRST PROGRAM TYPE)? And what percentage, if any, would you spend on (READ NEXT PROGRAM TYPE)? (COMPLETE LIST IN THIS MANNER).

Now I'm going to read back the categories and your estimates. (REREAD CATEGORIES AND RESPONSES IN RANDOM SEQUENCE ORDER TO ALLOW RESPONDENT TO REVIEW THE ESTIMATES.)

Are there any changes you would like to make? (RECORD ANY CHANGES BY CROSSING OUT ORIGINAL RESPONSE AND WRITING IN REVISED RESPONSE NEXT TO IT. PERCENTAGES MUST STILL ADD TO 100 PERCENT; PROMPT RESPONDENT IF THEY DO NOT.)

Thank you for your time and cooperation.[195]

The Bortz surveys showed that cable operators would have allocated their distant signal program budgets as follows:

	Percentage Allocated[196]			
	1989	1990	1991	1992
Live professional and college team sports	34.2%	37.2%	36.3%	38.8%
Movies	31.2	30.1	25.7	25.6
Syndicated shows, series and specials	16.9	14.5	15.6	16.0
News and public affairs programs	11.8	11.9	14.8	12.4
Devotional and religious programming	4.3	3.6	4.3	3.9
PBS and all other public TV programming	1.3	2.7	2.9	3.0
Canadian programming	0.2	--	0.5	0.3
TOTAL	99.9%	100.0%	100.1%	100.0%

Bortz drew three primary conclusions from the 1989 and 1992 survey results. First, sports programming was the distant signal programming type most highly valued by cable operators. Second, the disparity between the value of sports programming and the value of movie and syndicated programming increased from 1989 to 1992. Finally, in an open market where compulsory licensing did not exist, cable operators would have spent more than one-third of their 1989 to 1992 distant signal program budget on sports programming.[196]

Bortz acknowledged that the surveys did not ask the respondents to identify what they actually allocated during the period in question;[197] that the survey does not consider free, open market negotiation and does not consider the seller's side;[198] that system operators do not have to make a decision about dividing their limited resources among the various program categories that are defined in this proceeding;[199] and that the Bortz surveys do not look at actual behavior or actual budget allocation.[200] Bortz also testified that his figures were merely an estimate and that it is a "good" estimate if it is within 2-4 percentage points.[201]

James Trautman, Vice President of Bortz & Co.,[202] testified for the JSC, and described the methodology used in the 1992 Bortz survey. A stratified random sampling approach was used with the stratification based on copyright royalty payments.[203] Only Form 3 systems were surveyed.[204] More systems with large royalty payments were sampled compared to systems with small royalty payments.[205] Burke Marketing Research performed the actual telephone survey.[206] Trautman and Bortz oversaw the selection and training of the interviewers.[207] All of the interviewers specialized in surveying professional and managerial personnel.[208] The interviewers were instructed to call back as often as necessary to obtain a completed interview or definitive refusal to cooperate.[209] The interviewers were not told the name of the client or given any information regarding the nature of the study other than that contained on the interview form.[210]

In 1991, 221 questionnaires were administered and the survey was completed for 198 or 89.6%.[211] In 1992, 233 questionnaires were administered and 189 surveys were completed for a response rate for the key valuation question of 76.8%.[212]

Trautman agreed that the Bortz survey deals only with operators and does not study or analyze cable subscribers;[213] he also testified that of the respondents that answered the Bortz survey in more than one year, only 60-70% of those respondents answered within a range of 10% of their previous responses.[214]

A number of witnesses testified that the Bortz approach was the best way to measure the relative marketplace value of the different categories of distant signal programming. Among others, Dr. Joel Axelrod, president of an international market research firm, testified that if cable operators actually had to purchase different categories of distant signal programming, the results would very closely mirror what they have reported here;[215] Dr. Stephen Wildman, an economist and Director of the Program in Telecommunications Science, Management, and Policy at Northwestern University, testified that it makes sense to ask the cable operator how he or she values things rather than looking at a viewing measure;[216] and Dr. Scheffman testified that results in an open marketplace ought to be "very similar" to the Bortz results.[217]

Dr. Salinger testified that the Bortz survey is a close and unbiased estimate of what cable operators would pay in an open market.[218] Dr. Salinger indicated that the correct question for royalty allocation would have been: "What prices of different types of programs would induce a cable system to purchase the program mix that it actually showed?"[219]

Paul J. Much, a witness for the NAB, is a valuation expert and Senior Managing Director of Houlihan, Lokey, Howard and Zukin, a financial consulting and valuation firm.[220] Much testified that it is appropriate for the Panel to look at the Bortz surveys' measure of cable operators' valuation of program categories to allocate royalties to the various categories.[221]

Much explained that the determination of value in the distant signal marketplace is similar to the task of allocating value to different classes of securities in a corporate acquisition where the total purchase price has already been determined.[222] The standard used is fair market value.[223] That is defined as the price at which a property would change hands between a willing buyer and a willing seller when the buyer is not under any compulsion to buy and the seller is not under any compulsion to sell, and both parties have reasonable knowledge of the relevant facts.[224] Considering the hypothetical willing parties, the determination of fair market value focuses on the economic attributes of the securities to be valued and not the individual motivations of the specific parties who hold these securities.[225] Much testified the valuation which this Panel must perform is similar to forced sale situations because copyright owners may not refuse to "sell" their programs, and the total price the cable operators pay for the distant signals is fixed.[226] From a valuation standpoint, the relative value of the different categories of programs is driven by the cable operators' assessment of the economic attributes of the programs. According to Much, the allocation of value/royalties confronting this Panel should be made on the basis of the buyers/cable operators' relative valuations of program categories.[227] It would not be appropriate to first try to determine what would take place in a hypothetical open marketplace and then adjust the cable operators survey results to reflect the seller's side.[228]

Much disagrees with the argument that the Bortz surveys are faulty because they do not take the seller's side into account. The seller has to sell the distant signal. He also disagrees because we are only concerned with the relative valuation decision.[229] According to Much, the Tribunal's concerns regarding the seller's perspective do not provide a basis for discounting the Bortz surveys.[230] The Bortz surveys represent the reality of the marketplace.[231]

Criticisms of Bortz Surveys

A number of witnesses testified as to perceived defects in the Bortz surveys.

Dr. Martin Frankel, Professor of Statistics and Computer Information Sysetms, Bernard Baruch College of the City University of New York, testified on behalf of the Program Suppliers. In his opinion, the Bortz surveys are not accurate.[232] They have low reliability and lacked validity. Dr. Frankel used two methods as the basis for his conclusions.

First, he compared the cable systems operators' responses in successive years. He used the 1989 and 1990 survey years because the more recent surveys involved only one-third or one-quarter of the 140 systems included in the prior years' surveys.[233] Comparing the 1989 and 1990 figures, Dr. Frankel was able to attain a quantitative measure of the relative degree of consistency between pairs of values by using the "R-squared" method. Using this method, Dr. Frankel determined that any value less than 0.75 indicates a substantial lack of reliability.[234] The numbers found by Dr. Frankel ranged from a low of 0.014 to a high of 0.165, demonstrating either that the values assigned by operators vary widely from year to year or that the question being used to measure the value of different program types does not have high reliability.[235]

Dr. Frankel tested the validity of the Bortz survey results to determine whether they measure "true value." He did this by comparing the value allocated to PTV programs in the Bortz surveys with the proportion of the royalty payments attributable to the actual carriage of the PTV station.[236] This comparison showed very little correlation between the Bortz responses for PTV and the relative amount of royalties paid for PTV stations.[237]

Dr. John Woodbury, Vice President, Charles River Associates, also testified for the Program Suppliers. He said the Bortz results were not reliable because the operators' responses did not correspond with actual market place behavior.[238] He believes that surveys which ask how much a person is willing to pay for various goods or services are suspect because the respondents are not required to pay these amounts.[239] Dr. Woodbury used a regression analysis to measure the extent to which the operators' answers corresponded to their actual choices.[240] Using data supplied by Bortz, and programming information provided by Dr. Besen, Dr. Woodbury determined the correlation between the respondent's hypothetical budget and the share of programming for the type of distant signals actually carried.[241] Dr. Woodbury's analysis used the hypothesis that Bortz respondents who gave a high allocation for a program type would carry a proportionately greater amount of that programming than would respondents who had given the same program type a small allocation.[242] For the years 1990 to 1992, Dr. Woodbury found only three of the 13 analyses he performed had any statistical significance.[243] Dr. Woodbury thus concluded there is no relationship between how operators say they would allocate distant signal programming and the choices they actually made.[244]

Dr. Alan M. Rubin, Professor, School of Communications Studies, Kent State University, was another witness for the Program Suppliers. He testified concerning the difficulties he perceived in the Bortz surveys' programming categories.[245] As an example, Dr. Rubin noted that PTV includes documentaries, nature programs, news and public affairs, syndicated series and movies.[246] Yet, in the Bortz surveys, these are all encompassed by the "PBS" category. Another example involves station-produced programming which typically includes public affairs talk shows, children's programs, news magazine and interview shows, sports, documentaries and specials. However, many of these same types of programs are syndicated shows and are thus in another category.[247] Because of these "category" problems, Dr. Rubin believed there is no consistency in the values assigned by the cable operators in response to the Bortz surveys.[248] Dr. Rubin also criticized (1) the fact that many of the respondents were someone other than the general manager or programming director of the cable system,[249] (2) the fact that the interviews were conducted over the telephone rather than face-to-face,[250] and (3) the use of a "budgeting exercise" rather than asking the respondents to assign a point total or dollar amount to each category independent of the others.[251]

Dr. Rubin disagrees with Bortz' opinion that "value" is measured by the cable system's ability to attract and retain subscribers. Rather, in Dr. Rubin's opinion, the primary reasons people subscribe to cable television are (1) better reception, (2) greater program variety, and (3) more movies.[252] Dr. Rubin also testified that it is the judgment of the subscribers rather than the cable operators that matters. Dr. Rubin believes that if you ignore audience preferences you will go out of business. In a similar vein, Dr. Rubin criticized the Bortz surveys because they do not measure the opinions of the subscribers themselves.[253]

Dr. Gary Ford, professor of marketing at The American University, testified as a witness for the Canadians.[254] In Dr. Ford's opinion, the Bortz surveys have such substantive methodological flaws they do not provide value results regarding the value of programming.[255] It is not possible for the survey respondents to validly answer the key "Question No. 4" when it requires them to aggregate all non-network programming into programming categories which are shown in different amounts on different signals while simultaneously excluding the network programming that falls into those same categories.[256] An example given by Dr. Ford is the following: Assume a broadcast station which includes major league baseball and basketball, as well as movies from the station's own library, other movies, syndicated shows, news and public affairs, and a Canadian program that has international sports as well as major league baseball and National Hockey League games.[257] The survey respondent, during the course of a phone conversation, is expected to weigh and evaluate all this different programming in a short time period. According to Dr. Ford, this is not possible.

Dr. John E. Calfee, also a witness for the Canadians, testified that the Bortz survey is unsuited to assessing the demand for a niche product such as Canadian programming.[258]

Dr. Richard Ducey, a witness for the NAB, did not see any usefulness in comparing a complete channel i.e., Canadian or PTV to a programming category on another channel. Such a comparison is not a very good measure and does not have good construct validity.[259]

PARTIES' ARGUMENTS AS TO SIGNIFICANCE OF THE BORTZ SURVEYS

The claimants other than Program Suppliers and the Canadians contend the Bortz surveys should be the starting point for the Panel's awards because the survey was designed to and does measure relative marketplace value.[260] Some claimants note it was the perceptions of the cable operators about the value of distant signals which drove their decisions and generated the monies contained in the royalty fund. It is also argued that the Bortz surveys are better suited to addressing real-world considerations, taking into account a host of factors beyond simple viewing data.[261] These claimants further argue if the simulated marketplace involves copyright holders being forced to sell, leaving only the relative price for each category at issue, the record establishes that the "supply" side need not be considered.[262] As Much testified, in forced sale situations, value is determined by the economic attributes of the asset and not the motivations of the particular seller.[263] Program Suppliers respond that the "forced sale" analogy does not work for three reasons: first, it is the antithesis of free market conditions because it does not involve willing buyers and sellers; second, although the royalty fund is a fixed amount, a relative value determination is not limited by the dollar amount of the royalty fund; and third, courts have held that an "unwilling seller's" actions must be considered in setting a fair market value.[264]

The Bortz-proponents further argue that "value and viewing can move in opposite directions," noting that although the average hourly ratings for network sports programming declined, the value of sports programming, as measured by rights fees, skyrocketed.[265]

As to the validity of the surveys, the Bortz proponents contend the surveys were carefully constructed and properly executed. They say no new substantial criticisms of the survey were raised in this proceeding.[266] Program Suppliers respond by claiming that "old" criticisms have never been rectified.[267]

The Bortz advocates further contend that advertising is of minor importance in the cable marketplace, representing only 5% of cable operator's revenues.[268] Consequently, cable operators rely on market research similar to the Bortz surveys to make decisions.[269] Program Suppliers respond that the Bortz surveys have never been utilized other than for purposes of the distribution of these royalties and that the research referred to concerns subscribers rather than operators.[270] The goal of a cable system operator is not to attract the largest number of subscribers, but to maximize cash flow. This is so even over maximizing profits.

PTV's proposed Bortz "adjustments" will be considered in the section below addressing PTV's claim.

The Program Suppliers also have a multitude of criticisms directed at the Bortz survey. They contend:

-- it relies on "subjective impressions that have no anchor in reality;"[271] (The other claimants respond, in part, that the Bortz survey is not a mere attitudinal survey; that it measures the relative value of components of distant signals that the cable operators have already purchased.)[272]

-- it uses a "fixed" program budget;[273] (In response, the Bortz proponents note that Program Suppliers complained about this in the '89 proceeding, but the Tribunal gave no weight to the objection.[274]

-- it makes no attempt to compare the respondents' actual distant signal carriage behavior with their relative value answers to see if their opinions matched actual behavior;[275] (In response, the Bortz advocates point out that Program Suppliers' witness, Dr. Frankel, is not an expert on the cable industry, was unaware of the various factors which could cause a particular system's answers to change from year to year and thus did not control for any of them.[276] Program Suppliers say this is contrary to the consistency contention: that the Bortz results have remained stable over time despite changes in the industry.[277]

-- it does not consider free, open market negotiation and does not consider the seller's side; (Other claimants point out Much and Drs. Salinger and Scheffman all testified that supply-side considerations are not appropriate for the Panel's task.[278]

The Devotionals also contend the Bortz surveys were "likely" to have taken into account any "supply side" considerations, since the respondents were likely to be aware of the values of program in other markets, and to take that into consideration when responding to the key question.)[279]

-- it does not measure the opinions of the subscribers themselves;[280]

-- the categories are not sufficiently precise.[281]

In response to the various criticisms of the Bortz surveys offered by Dr. Rubin, others respond that Dr. Rubin offered no quantification for any of his complaints; that Dr. Rubin's complaint about the use of a constant sum scale was made and rejected in the '89 proceeding; and, in response to the complaint about the identity of the respondents, note that Bortz testified that marketing managers were among the people at the cable systems most responsible for program budgeting decisions.[282]

Program Suppliers emphasize Dr. Woodbury's analysis which shows no correlation between the Bortz respondents and the actual behavior of the cable operators.[283] Other claimants respond that Dr. Woodbury's very premise -- that viewing or hours shares ought to correlate with value -- is wrong. Therefore, the analysis cannot shed any light on the validity of the Bortz surveys.[284] Program Suppliers say this mischaracterizes the analysis which, in fact, measured whether the Bortz respondents who gave a high value to sports retransmitted a higher amount of sports programming than respondents who gave a low value.[285]

Program Suppliers also point out that the ability of the Bortz respondents to accurately recall their perceptions of relative value is called into question by the fact that one-fifth of the respondents to the 1991 survey failed to notice that they were given the wrong distant signal carriage complement because a signal had been omitted.[286]

Program Suppliers dispute the Bortz proponents' assertion that the economics of the cable business is all about how to gain subscribers and keep them. According to Program Suppliers, almost all witnesses agreed that the economics of the business is about maximizing profits, with the attraction and retention of subscribers being a "subsidiary goal."[287] Bortz addresses, at best, only this subsidiary goal. The other claimants respond that all of the ways cited by the Program Suppliers to maximize profits depend upon the number of subscribers that the system attracts and that no expert criticized the Bortz surveys on this basis.[288] They also point out the cable operator witnesses who agreed with the importance of attracting and retaining cable subscribers.[289]

Program Suppliers further contend "consistency" of results year after year does not show "validity" and that neither Bortz nor the survey proponents has undertaken a test to determine whether and to what extent the Bortz responses match actual behavior. Thus, according to Program Suppliers, it is impossible to determine how closely the opinions would reflect fair market value in actual purchase decisions.[290] Other claimants respond that numerous experts from a variety of disciplines testified that the Bortz results did have predictive validity and were a good estimate of marketplace value. They also note that because cable operators purchase signals rather than programs or categories of programs, there is no distant signal purchase behavior that anyone could compare with the survey results.[291]

The Canadians argue "numerous" experts testified the survey was simply too blunt and too flawed to measure the value of Canadian programming. (Measuring Canadian value through the Bortz study is likened to weighing a T-shirt on a bathroom scale.)[292] They suggest this point is confirmed by the testimony of Bortz himself who stated that he believed his estimates were good if they were within 2-4 percentage points. According to the Canadians, given the fact that their shares in the Bortz surveys are 0.5% or less, and their claim is for less than 2%, the Bortz survey was simply unable to measure the Canadians' share.[293]

The Canadians also claim the Bortz results are directly contradicted by the royalty data which shows that cable operators actually spend about 2% of basic fund royalties to carry Canadian stations while Bortz predicts the operators would have spent between 0% and 0.6% of their budgets for all of the programming on Canadian stations.[294] JSC responds by noting there is little difference: under the Bortz survey, the Canadians would be entitled to "perhaps as much" as 0.6% of the total royalty pool while, under the Canadians' own approach, they might be entitled to as little as 0.6% of the total royalty pool.[295]

OBSERVATIONS CONCERNING THE BORTZ SURVEY

The critical significance of the Bortz surveys is the essential question it poses to cable system operators, that is: What is the relative value of the type of programming actually broadcast in terms of attracting and retaining subscribers? That is largely the question the Panel poses when it constructs a simulated market. Further, the question asks the cable system operator to consider the same categories we are presented here in the form of claimant groups -- that is, sports, movies, and the others. That is also what the Panel must do. The question then asks the cable system operator what percentage of a fixed dollar amount, "...would you spend for each type of programming?" That question does not take into account the "supply" side of the supply and demand equation in an open market. The question should ask what would the cable system operator have to and be willing to spend. While the operator may be willing to spend a certain amount of its budget for a given category of programming, the market supply may be at odds with what the operator is willing to spend. While this is a significant limitation on our acceptance of the Bortz survey, it is nonetheless focused more directly than any other evidence to the issue presented: relative market value.

There are two other limitations of the Bortz survey. The first involves its execution, which considerably affects the Panel's confidence. In a telephone interview of approximately ten minutes, the cable system operators were asked to configure a market that does not comport with the way programming is handled in their every day business. That is, they were not asked to decide the value of a distant signal station (which they had made an affirmative decision to carry or not carry) but rather to decide the value of individual components of different stations and then aggregate them in a manner they had never seen and, in a relatively few minutes, assign a value to each of those categories. Ironically, what they did in ten minutes is what this Panel is being asked to do after considering hundreds of hours of testimony, 12,000 pages of transcripts and hundreds of pages of briefs. Second, this was a survey of attitudes rather than a survey of conduct. Without contradiction, all of the witnesses say that it is far better to survey conduct.

In conclusion, the Bortz survey is well designed and attempts to ask the right question, but does not quite do so. However, even if it did so, it still is constrained by the inherent limitation that it is a study of attitudes. Conducting a survey in such a short time, and asking the operators to categorize programming in an unfamiliar way, precludes its acceptance *in toto*. Considered as a whole, the Panel nonetheless finds the Bortz survey highly valuable in determining market value.

D. THE BESEN STUDY AS EVIDENCE OF MARKET VALUE

In further support of their claim, Program Suppliers presented an econometric study by Dr. Stanley Besen, Vice President of Charles River Associates. The study employed a multiple regression analysis to estimate the relative value to cable operators of each program category carried on distant signals (excluding PTV and the Canadians for which there were insufficient data). This was estimated by a "hedonic" analysis measuring the correlation between changes in compulsory license royalty fees paid by cable systems and changes in viewing hours for each program category carried by those systems. Treating royalty payment changes as reflecting the marginal value of distant signal programming to cable operators net of associated revenues and other costs, the Besen study examined percentage changes in those payments arising from actual cable operator decisions to add, drop, or swap distant signals between any two successive six-month accounting periods from 1988 to 1992.

Those royalty payment changes were then correlated with percentage changes during the same successive periods in the total number of viewing hours for each program category carried by the particular cable systems, based on data from Nielsen's diary-based viewing studies provided by the Program Suppliers. To take differences in day-part values into account within each program category, the viewing hours were weighted by their proportionate shares of Nielsen national viewing data for each category.[296] Available data initially permitted 423 observations, which, after filtering for various data problems, were reduced to 208 observations for 171 individual cable systems. Observations were limited to instances in which a cable system both dropped and added one or more distant signals, in order to highlight the effects of programming changes on royalty payments.[297]

The correlation coefficients produced by this analysis, expressed in fractions of 1.0 in which 1.0 equals absolute correlation, were transformed into percentage shares of relative value by moving the decimal point (equivalent to multiplying by 100). In statistical terms, Dr. Besen's analysis had an explanatory power of .30 which means that distant signal programming changes explained 30% of royalty payment changes.[298] The remaining 70 percent were attributable to other factors not measured.

Dr. Besen's basic equation estimated negative coefficients (less than zero correlation) for both local station-produced (NAB) and devotional programs, with only the movies/series result statistically different from zero. The resulting relative shares were:

Program Category	Share[299]
Movies/Series	86.3%
Sports	7.7%
NAB	-1.4%
Devotional	-0.25%

Dr. Besen preferred to rely on those results.[300] Nevertheless, as an alternative he adjusted those results to assume that the coefficients for local and devotional programming were positive, by utilizing for those two categories the coefficients at the upper bounds of their confidence intervals, and then scaling the resulting positive coefficients to add up to 100 percent.[301] As adjusted, the estimated shares for each of the program categories were as follows:

Program Category	Share[302]
Movies/Series	86.3%
Sports	7.7%
NAB	-1.4%
Devotional	-0.25%

These results were substantially similar to those of the Nielsen study presented by Program Suppliers in this proceeding, a consequence which Dr. Besen termed "coincidental" since he had never seen the Nielsen numbers.[303] Program Suppliers describe the Besen study as presenting, for the first time, an analysis of actual cable operator behavior in contrast to attitudinal surveys lacking predictive validity.[304]

The Besen study was criticized on numerous conceptual and methodological grounds by four economists presented by other parties: Dr. Robert Crandall, Senior Fellow in Economic Studies, the Brookings Institution (JSC); Dr. Michael Salinger (Devotionals); Dr. Scheffman (PTV); and Dr. George Schink, former Senior Vice President, Wharton Econometric Forecasting Associates

Group and now Principal of the Law and Economics Consulting Group (NAB). We summarize here only their major criticisms, together with Program Suppliers' responses.

All four opposing experts observed that in utilizing viewing hours as the measure of program value to cable operators, the Besen study foreordained its results, measuring no more than an estimate of each program category's share of viewer weighted hours.[305] Dr. Besen acknowledged that his analysis treated viewing as a measure of value to the cable operator.[306] Dr. Salinger testified that the Besen study failed to exclude the null hypothesis that percentage changes in total hours explained royalty changes equally as well as programming composition changes.[307] He found that the same 30% explanatory power resulted no matter what categories the signal may be divided into,[308] because the study was merely a complicated way to establish each category's share of viewer weighted hours.[309] In response to these criticisms and to the related skepticism of the other parties concerning the "coincidental" similarity between the Besen results and the meter-based Nielsen study results, Program Suppliers pointed out that Dr. Besen had no access to the current Nielsen meter study. Dr. Besen relied on Nielsen diary data (not presented here), and there was no evidence that Nielsen diary data results were closely linked to the Besen results.[310]

Several criticisms concerned the Besen study's omission of critical variables such as changes in cable network programming and in available broadcast programming, the availability of premium channels, local economic and demographic conditions, the influence of the distant signal schedule on royalty rates, and channel constraints.[311] Dr. Schink referred to these omissions as "model misspecification." Dr. Besen conceded that he did not perform a true hedonic analysis which would have required consideration of such other factors.[312] Dr. Besen himself had criticized a regression analysis submitted by JSC in the 1979 proceeding for omitting critical variables, and the Tribunal had given no weight to that study.[313] Program Suppliers responded that such other factors change only slowly over time and that it is unlikely that such factors would significantly affect royalty payment changes in the six-month periods examined by Dr. Besen. Further, any such changes would most likely be excluded from the Besen analysis by the filters that eliminated observations involving very large changes in monthly subscriber rates or royalty payments. The Besen study was not designed to explain the effects of all factors that might change royalties, only the effects of programming changes for which the study reported an explanatory power of no more than 30%.[314]

A third set of criticisms was that Dr. Besen's samples, of both distant signals and cable systems, were nonrandom and not representative. The 208 observations over five years averaged only 21 changes in each six-month accounting period, and 36% of those changes could be accounted for by the addition or deletion of just three superstations: WTBS, WWOR, or WGN.[315] Sample sensitivity was demonstrated by the inconsistency of the Besen results across subsamples. Dr. Crandall testified that considering only observations in the Besen sample in which a distant signal was added, the relative value estimates of Besen's basic equation were reversed, with the sports share jumping from 7.7% to 54.8% and the movies/series share dropping from 86.3% to -21.7%.[316] Dr. Besen found this result shocking and unbelievable.[317] In addition, Dr. Crandall found that the Besen equation had only two significant coefficients: sports for systems adding signals and movies/series for systems dropping signals.[318] The use of the diary-based viewing studies also was said by NAB to bias the Besen results in favor of movies and syndicated programming, and against station-produced programs, by reliance on a sample that included virtually all independent stations carried as distant signals but only half of the network-affiliated stations, as previously found by the Tribunal.[319] Dr. Besen's exclusion from the sample of observations in which added signals carried program categories that had not previously been carried at all, such as religious programs in five or six instances, while perhaps technically necessary in Besen's methodology to avoid an unmeasurable infinite percentage increase,[320] also were said to make the Besen results unreliable.[321] Program Suppliers' response to Dr. Crandall was that transforming the coefficients in Crandall's adds-only subsample analysis, by assuming negative coefficients to be zero and weighting the sports coefficients by the number of observations for each subset of sports, yielded results similar to Dr. Besen's.[322] (JSC responds that Program Suppliers have not explained what such "transforming" and weighting of Dr. Crandall's coefficients means, and that no expert evidence supported such an adjustment of Dr. Crandall's analysis.[323]) No bias arose from Dr. Besen's use of diary-based viewing data, because the bias claim rests on the overall composition of all stations in the Nielsen diary study while Dr. Besen used viewing results only on an individual station level. Dr. Schink testified that a random sample is not necessary for an analysis such as Besen's unless there is insufficient variation in the attributes within the sample,[324] but no witness indicated that the Besen sample lacked sufficient variation. Nor did any economist challenge Dr. Besen's professionally routine exclusion of observations that would have resulted in infinite percentage changes.[325]

Dr. Schink testified that the Besen study suffers from an analytical defect called "multicollinearity," which compounds the model misspecification problems arising from omission of significant variables. Multicollinearity results when strong correlations exist among the explanatory variables in the regression model. This defect makes it essentially impossible to estimate accurately the coefficients in the Besen model, thereby rendering inaccurate Dr. Besen's estimates of the relative value shares.[326] Dr. Besen did not test for multicollinearity, although he agreed that one sign of multicollinearity is a program category having a negative coefficient when it is expected to be positive.[327] Dr. Besen's preferred basic equation showed negative coefficients for NAB and Devotionals and a statistically insignificant correlation for JSC, indicating that the only distant signal programming of value to cable operators was the "movies and series" category, a result which Dr. Schink said "makes no sense" and Devotionals called "absurd."[328] In Dr. Besen's analysis there is a relatively strong correlation between the percentage changes in movies/series and the percentage changes in local programming hours, and a weaker correlation among the percentage changes in devotional, sports and movies/series programming hours.[329] Dr. Schink concluded that considering the omission of critical variables, the low explanatory power of only 30% and the reduced reliability of coefficients due to multicollinearity, the Besen study "should literally be disregarded."[330] When Dr. Schink applied a method called "principal components" regression analysis to correct for the multicollinearity in the Besen study, the following estimated relative value shares resulted:

Program Category	Share[331]
Movies/Series	43.38%
Sports	31.28%
NAB	13.75%
Devotional	11.59%

These results are comparable to those of the Bortz study.[332] This correction does not "cure" the multicollinearity, which would require time-consuming and expensive collection of additional data that does not have multicollinearity problems, but it reflects results having the lowest volatility in the estimated model coefficients.[333] Program Suppliers respond that multicollinearity was not clearly demonstrated by four rule-of-thumb tests performed by Dr. Schink but only by the formal signal-to-noise test which is a "very tight test."[334]

OBSERVATIONS CONCERNING THE BESEN STUDY

The Panel finds all of the critiques of the Besen study to be telling, to one degree or another. In particular, the Panel finds that utilization of Nielsen viewing hours as the measure of program value to cable operators inevitably forecasted the outcome of Dr. Besen's study. Nielsen viewing hours were built into Dr. Besen's equation even before weighting for those hours further magnified their impact. While Nielsen's meter-based results were not available to Dr. Besen, those results are highly consistent with the 1989 diary-based results.[335] It may reasonably be presumed that the same is true of the more recent diary data on which Dr. Besen did rely. More importantly, since the criticism is not one of manipulation but one of conceptual bias, which is not dependent upon awareness of the particular Nielsen meter numbers, Program Suppliers' response does not dilute the substance of this criticism. Moreover, the omission of significant variables was compounded by the degree of multicollinearity found by Dr. Schink, as illustrated by the reverse results produced by Dr. Crandall's adds-only subsample analysis and by the statistical significance only of sports adds and movies/series drops. There is no evidence that more than six months is required for changes in other important variables to affect royalty payments; the evidence is to the contrary.[336] Dr. Salinger's evidence that Dr. Besen had failed to exclude the null hypothesis and that any categorization of distant signal programming would yield the same 30% explanatory power was not contradicted by any expert analysis or evidence, nor was Dr. Crandall's evidence that the Besen study is inconsistent across subsamples. The negative coefficients or statistically insignificant results from Dr. Besen's basic equation for all claimant groups other than movies/series are incongruous and lend strength to Dr. Schink's finding of multicollinearity. Dr. Besen's adjustment in producing his alternative results was not supported by any economic analysis or rationale other than avoidance of the negative coefficients. The national Nielsen data, although not employed in Dr. Besen's total hours regression, were employed in Dr. Besen's weighting of individual station results and thereby introduced bias to the extent previously found by the Tribunal. Furthermore, by its own terms the Besen study leaves 70% of distant signal programming changes unexplained. The Panel finds that the Besen study adds no reliable support to Program Suppliers' claim.

E. ANALYSIS AND AWARD WITH EACH CLAIMANT'S ADDITIONAL EVIDENCE.

1. PROGRAM SUPPLIERS

In addition to the Nielsen and Besen studies, Program Suppliers presented other evidence which they claim corroborates the high value that would be placed on movies and syndicated programming in a distant signal open market.

Program Suppliers point out that the breadth of the programming their claim encompasses is staggering, with over 30,000 feature films and 20,000 syndicated series available for syndication.[337] The over-100 claimants of all sizes which make up the Program Suppliers category hold the copyrights to 7,500 different works that are encompassed in their claims for royalties in this 1990-92 period.[338] The programming covers the entire gamut of storytelling, entertainment, news information, documentary, and a host of other subjects including talk shows, game shows and children's shows.[339] This broad range shows why these programs are valued on distant signal, both for mass appeal and for niche programming.

Howard Green, Executive Vice President of Sales Operations for Twentieth Television at Twentieth Century Fox, testifying for the Program Suppliers, explained the history and significance of syndication. Syndication refers to the licensing of programs on a market-by-market basis.[340] The syndication market has grown as more and more independent stations became operational. Independent stations do not have access to programs from the networks and therefore needed to obtain programs from other sources, primarily "off-network" series.[341]

For a long time, syndication was done on a straight cash basis, meaning that a station pays a license fee directly to the syndicator.[342] The negotiations as to the fee revolve around ratings and the stations bear the risk that the program will be successful.[343] In the mid-1980's, first-run and barter syndication became more important. The change was due to the growth of satellite dishes which allowed the delivery of programs with advertisements integrated into them.[344]

Other witnesses explained that barter syndication means a syndicator negotiates with a station over the amount of advertising time that each will retain in a program.[345] A syndicator will market the retained advertising time to national advertisers. The sale of this time represents the only revenues received by the syndicator under the barter system.[346]

Jack Valenti, President of the Motion Picture Association of America,[347] testified that on almost any cable system in America, you will find the number of hours devoted to syndicated programming overwhelms all other categories.[348] Syndicated programming has a great deal of value because of the resources that are invested into the production. That programming requires a blend of imagination, talent and money that can bring to life a story idea in a way that attracts viewers.[349] Production costs are very high.[350] The upfront cost for producing theatrical feature films is also very high.[351] Despite the cost, most series fail. Only about 1 in 20 series survives long enough in either network or first run broadcasts to have a chance to recoup those costs.[352] Only 2 in 10 films break even after theatrical runs.[353] The ones that do survive, however, have a proven track record for attracting audiences that makes them valuable in syndication.

The Program Suppliers note that in the 1989 proceeding, the Tribunal reduced the award for syndicated series because "although syndicated series had high totals in viewing, cable operators do not expect to have to pay that much for them."[354] The Program Suppliers presented the testimony of Henry Saperstein, Chairman and CEO of UPA Productions of America, who explained that some series and movies withstand the test of time and are continually valuable. These are referred to as "evergreen." That means that they continue to attract new viewers year after year.[355] They are often used to counter-program major events such as the Super Bowl because they have loyal, devoted audiences.[356] The programs are sold for what the traffic will bear and what the traffic will bear is determined by how many people in the market want to buy it.

Within the syndicated category there are a number of important programming groups that have appeal to particular audiences. Science fiction and children's programming are two examples. Another witness, Richard C. Thrall, Senior Vice President, Operations and Administration, Multimedia Entertainment, Inc.,[357] explained that first run programming, including talk shows, grew increasingly important during the time period at issue.[358] Talk show viewers are avid viewers.[359] Distant importation allowed these viewers to create their own "virtual talk show channels" by switching back and forth to channels that carry such programs.[360] In comparison to the prices paid by TNT for a national rights NBA package, on which the Tribunal relied in the 1989 proceeding,[361] the rights fee paid for "Oprah" in 1991-92 was more than double ($630,916) the rights fee paid for the NBA games ($307,500).[362] According to Thrall, advertising revenues for talk shows grew from $1.2 billion in 1990 to $1.345 billion in 1992, a higher growth rate than was experienced in other areas of television advertising revenues.[363] Further, during the period 1986 to 1992, syndicated advertising revenues doubled from $650 million to $1.345 billion.[364]

Program Suppliers' Arguments

In addressing how this Panel can best "simulate the marketplace" for the purpose of distributing the royalties at issue here, Program Suppliers note that the basic cable network market offers a model for how distant signal transactions would be conducted in an open market.[365] The primary characteristic of such a market would be that the purchase transaction for programming would involve the copyright owner as seller and the distant signal as the buyer.[366] Program Suppliers further argue that in such a hypothetical open market the role of advertising revenues cannot be underestimated (advertising revenues account for 60-65% of cable network revenues while distant signals receive 100% of their revenues from advertising).[367] Large amounts of viewing are necessary to sustain the advertising revenues and the Nielsen ratings data is the best measurement of that viewing.[368] Hence, according to Program Suppliers, the Nielsen ratings should be the key determinant of value to this Panel.

Program Suppliers also emphasize Sieber's testimony. He stated that on WTBS, movies and series each account for approximately 45% (or 90% combined) of the schedule, while sports made up only 5% of the time. According to Program Suppliers, Sieber's testimony established that the rights fees for syndicated series and movies were comparable or higher than the rights fees for the Atlanta Braves and Hawks.[369] The cost to WTBS for sports and for syndicated programming which was actually broadcast in 1990-92 was comparable. If value is equated with programming costs, there would be comparable value on an hourly basis between syndicated programming and sports. However, because WTBS broadcast far more syndicated programs than sports programming, the syndicated programming would have a greater overall value. According to Sieber, the viewing-to-time ratio of distant sports programming on WTBS was 1:1.[370] (In 1989, the Tribunal relied on JSC's viewing to time ratio of 10.5:1 in crediting them for viewer intensity.[371]) Program Suppliers also point to Thrall's testimony regarding the growth in the first run syndication market during recent years.

The Program Suppliers conclude that the award they have requested is justified based on their evidence related to cable operator purchase behavior, cable subscriber viewing behavior, the vast array of syndicated programming, the working of the syndication marketplace, and the tools used by the most widely carried distant signal to achieve its success.[372]

Arguments In Opposition To Program Suppliers' Claim

In response to Program Suppliers' argument that the buyer/seller in the simulated market would be distant signals and copyright owners, other claimants first point out that this is contrary to Congress' intent in having the Panel substitute for direct negotiations between cable operators and copyright owners.[373] They further note that in the cable network market, which Program Suppliers contend is the appropriate "simulated market," its evidence demonstrated that sports would receive compensation that is consistent with the Bortz results and substantially in excess of viewing.[374]

Also with reference to Program Suppliers' "simulated marketplace" argument, other claimants respond that because stations cannot obtain advertising revenues for distant signal viewership, a key step in the Program Suppliers' syllogism simply is not true.[375] They also point out that even if the Program Suppliers' theory is correct, their Nielsen study does not provide a relevant type of viewing data. The gross tuning percentages the Nielsen study reports are not national ratings, which is what cable networks and barter syndicators would sell, and they are not local market ratings, which is what cable operators would sell.[376]

The other claimants also contend Program Suppliers have not shown, and cannot show, that advertising revenues and ratings would be important to cable operators. They argue the value of programming to cable operators, in a simulated marketplace, would be entirely different than the value of programming to advertisers.[377] They contend it would be "legal error" to allocate royalties based on advertising when the revenues and concepts are both irrelevant to the retransmission of distant signals.[378] The hypothetical negotiations between the distant signal and cable operator, and between the distant signal and the copyright owners, will be driven by whether the programming benefits the cable operator in terms of attracting and retaining subscribers.[379]

Responding to Program Suppliers' reliance on the variety of syndicated programs available, other claimants point out the record establishes that much of the syndicated programs and movies available to cable operators on distant signals duplicated what was already available for free over-the-air in the cable operator's market.[380]

<u>Analysis of and Award to the Program Suppliers</u>

Nielsen assigned a viewing share of 80 to 83% to Program Suppliers for the three year period. The Bortz surveys allocated to this category 41.3 to 44.5%. The Tribunal in the 1989 proceeding awarded 60% of the basic fund to Program Suppliers. Program Suppliers request an award of 80% from the basic fund.

While, as we indicated, we find the Nielsen viewing statistics reasonably reliable, particularly for the larger categories, we question the strength of the correlation between viewing and market value. The corroborating evidence of the viewing statistics upon which the Program Suppliers rely is not persuasive. The evidence presented explains that the movie and syndicated markets are difficult and perilous to investors. However, the evidence presented does not respond to the observations of the Tribunal in the 1989 proceeding that although movies and syndicated series command high percentages of viewing, cable operators do not expect to pay much for them.[381]

Program Suppliers' response that the programming is "evergreen" and the audience responds to it lacks persuasion. First run programming, including talk and game shows, has considerable value as is reflected in its rights fees and advertising revenues. However, in relation to other programming, the Panel finds that it has not maintained its relative market position.

The most significant value of Program Suppliers is its volume. The vast majority of distant signal viewing is in the Program Suppliers category. While the demand is high, the supply, as evidenced by the difficulty in the syndication market and relatively low prices for most syndicated programming, is more than sufficient. On a relative basis, we find circumstances have changed for the Program Suppliers since the last proceeding. The market value of movies and syndicated series has receded in comparison to other categories.

We allocate 55% of the basic fund to the Program Suppliers for each of the three years, and an additional 0.55% for 1990 because the Canadians have settled their claim for that year.

2. JOINT SPORTS CLAIMANTS

In addition to its primary evidence consisting of the Bortz surveys, the JSC presented other evidence to support its claim.

The JSC category includes more than 200 clubs, colleges and athletic conferences that are eligible to receive cable royalties attributable to professional and collegiate sports events.[382] Included within this claim are high profile sports such as Major League Baseball, NBA basketball, NHL hockey, college football and college basketball. The claim also encompasses other live professional and collegiate team sports, such as preseason NFL football, professional soccer and minor league baseball.

All of the programming of JSC is live and "first-run."[383] Unlike a movie or syndicated series, which may be shown many different times on different media (and thus compensated repeatedly), there is only the single opportunity to be compensated for a live sports telecast.[384]

James Mooney, the former President and Chief Executive Officer of the National Cable Television Association, testified that the cable industry has continued to support the compulsory license system "primarily to ensure continued access to the major sports events televised by superstations and other distant signals."[385] This is because sports fans "form the bedrock of the cable customer base" and they are the single largest group of cable subscribers.[386] It is a rule of thumb in the cable industry that not all cable subscribers are sports fans, but all sports fans are cable subscribers.[387] Sports fans are also intensely loyal.[388] They identify personally with their sports and while other subscribers may like non-sports programming, they do not regard the program as part of their persona.[389] The cable industry is concerned that without the compulsory license, subscribers would lose access to sports programming. The compulsory license effectively permits retransmission of a team's games outside of its home territory.[390] Distant signal movies and syndicated programming have become less important to cable because of the proliferation of independent television stations and cable networks.[391] The only exception is major league sports.[392]

Tyrgve Myhren is the president of the Providence Journal Company which, until recently, was a multiple system operator with approximately 800,000 subscribers.[393] He testified that the cable industry considered sports programming the most valuable programming on distant signals, during the years 1990-92, far more valuable than movies and syndicated programming.[394] The economics of the cable business is focused on how to gain subscribers and keep them.[395] The key to doing that is to have a sufficient amount of programming that is enormously appealing.[396] Cable operators do not need distant signals for movies and syndicated programming; there are numerous other attractive sources.[397] Because sports is live and perishable, it has a deep appeal to subscribers who value sports.[398] Sports motivates people to sign up and to continue subscribing to cable.[399]

Jerry Maglio, a former senior vice president of United Artists Cable, the nation's third largest multiple system operator, testified in a similar vein.[400] Maglio testified that: "[T]he cable industry in 1990, 1991, and 1992 valued the sports programs on superstations and other distant signals more highly than is reflected in the Tribunal's 1989 awards."[401] He further stated that the cable industry "perceived sports programming on distant signals as the most valuable distant signal programming."[402] Further, movies and syndicated programs from distant signals do not generate the type of interest that causes people to become or remain cable subscribers.[403] Maglio explained that you can find movies and syndicated programming on other cable signals, but you cannot find a specific team with a steady presentation of its games. People anticipated their t[illegible] and were in the habit of being able to follow the fortunes of the team.[404]

The value that subscribers place upon baseball and other sports programming also was discussed by Ken Burns, an award-winning filmmaker. Burns testified that Americans endow their sports games with a significance well beyond their literal importance.[405] According to Burns, because of the intensity of emotion that sports telecasts in general can provoke among the viewing public, simply having access to a team's telecasts has a value in itself which cannot be gauged by counting the number of minutes spent in front of the television set.[406]

Bortz testified that he has been personally involved in negotiations for the rights to sports programming and has conducted a wide variety of research about the cable industry.[407] The results of the surveys he conducted in 1990-92 are consistent with his experience in the industry.[408] The value of distant signal programming lies in its ability to attract and retain subscribers. Sports programming on distant signals is considered by the cable industry to attract and retain subscribers to a greater degree than any other type of distant signal non-network programming.[409]

JSC notes the Tribunal in the 1989 proceeding found relevant the license fees that claimants received in free marketplace transactions.[410] In this regard, it relies on the testimony of David Stern, the Commissioner of the NBA. He was responsible for negotiating all of the NBA's cable television contracts as well as broadcast television contracts and has been doing so since 1978.[411] Stern described the license fees that the NBA received from TNT for the three years involved, as well as the fees for the last two litigated cases in 1983 and 1989. Those figures are as follows:

NBA NATIONAL CABLE
NETWORK RIGHTS FEES[412]

Season	Number of Games	Rights Payments
1982-83	100	$5,500,000
1983-84	100	$5,500,000
1988-89	81	$23,000,000
1989-90	81	$27,000,000
1990-91	80	$57,000,000
1991-92	80	$66,000,000
1992-93	80	$74,000,000

Other evidence presented by the JSC included a report by Kagan Media Appraisals, Inc., which compared the market price and quantity for both JSC-type programming and non-JSC programming on cable networks for 1990.[413] The study showed that in the subject years, cable networks spent between 24.9% and 26.3% of their budgets to acquire JSC-type programming and that programming generated 4.3% to 4.8% of the cable networks' total viewing hours.[414] Therefore, the ratio of cost to viewing for this programming is between 5.3:1 to 6.2:1.[415] Between 73.7% and 75.1% of the cable networks' budgets was spent for non-sports programming and the viewing was between 95.2% and 95.7%, producing a ratio of .77:1 to .79:1 of cost to viewing.[416] The Kagan study further demonstrated that cable networks paid more to acquire just a few hundred hours of JSC-type programming, than for thousands of hours of non-JSC-type of programming.[417] Those figures are as follows:

COMPARISON OF MARKET PRICE AND QUANTITY
FOR JSC AND NON-JSC PROGRAMMING — 1990[418]

	Quantity	Market Price
MLB on ESPN	500 Hours	$100 million
NBA on TNT	178 Hours	$57 million
NICK	8,570 Hours	$54 million
FAM	8,205 Hours	$37.5 million
LIFE	8,760 Hours	$65 million
TNT (excl. NBA)	8,582 Hours	$148 million
USA	8,760 Hours	$135 million

The Kagan report also shows that cable operators paid more to acquire cable networks that featured JSC programming than they did to acquire cable networks featuring other kinds of programming. While you cannot directly translate this data into shares of the royalty fund, since the programming on this group of networks, taken as a whole, is not directly comparable in mix or value to the programming on distant signals,[419] nonetheless, the data illustrate that cable operators paid consistently high prices for cable networks featuring sports programming. The expenditures are as follows:

CABLE SYSTEM OPERATOR EXPENDITURES
ON CABLE NETWORKS
WITH AND WITHOUT JSC PROGRAMMING[420]

Cable Network	1990	1991	1992
ESPN (Most JSC)	$284 mil.	$327 mil.	$350 mil.
TNT (Some JSC)	$205 mil.	$232 mil.	$251 mil.
CNN + HN (No JSC)	$145 mil.	$154 mil.	$167 mil.
USA (No JSC)	$102 mil.	$118 mil.	$143 mil.
Other 11 Networks	All less than $70 mil	All less than $81 mil.	All less than $88 mil.

The carriage of superstations and fees paid by superstations have continued to grow. The three original superstations accounted for 47% of the instances of carriage in 1989. Their share increased to 51.3% in 1992.[421] Collectively, the seven superstations went from 51.8% in 1989 to 55.1% in 1992.[422] WTBS, WGN, and WWOR accounted for 67% of the basic royalties in 1989 and 75% in 1992.[423] Collectively, the seven superstations accounted for 76.1% of the basic royalties in 1989 and 80.1% in 1992.[424]

During the years in question the Atlanta Braves went from last place to first place.[425] In 1991, the Braves came from 9½ games out of first place at the All-Star break to win the pennant in the last week of the season.[426] The Braves repeated in 1992.[427] Those games appeared on WTBS. On WGN, the Chicago

Bulls won three consecutive NBA championships and featured perhaps the most famous athlete in the world, Michael Jordan.[428]

During this period, there was an increased availability of movies and syndicated series on basic cable networks as opposed to syndication. The number of cable networks expanded greatly between 1989-92.[429] As an example, American Movie Classics had a very limited reach in 1989 but, by 1992, it reached 43 million households.[430] USA and Lifetime, cable networks, began acquiring pre-broadcast syndication rights to major movie packages in late 1989. These factors contributed to the declining importance of distant signal movies.[431]

Joint Sports Claimants' Arguments

JSC notes that in the 1989 proceeding, the Tribunal held that the results of the Bortz survey were given substantial weight where "corroborating evidence" existed.[432] The record in this proceeding, according to JSC, contains even more corroboration of the high value of sports programming, particularly the testimony of Mooney, Myhren and Maglio.[433] On the "viewer avidity" factor, JSC points to the testimony of Ken Burns as well as the subscriber surveys conducted by NAB in the 1983 proceeding and the surveys of cable operators' views presented by JSC and the Canadian claimants.[434]

License fees paid in market transactions provide additional corroboration, according to JSC.[435] Those fees are five to six times higher than one would expect if viewing measured value.

Further, the financial data presented in this proceeding accounts for the "seller's perspective."[436] In addition, the results of the Kagan report would result in an award to JSC of 32-42% of the royalty fund.[437]

The Tribunal has articulated a "changed circumstances" rule to justify a change in the amount of awards it has made.[438] In this regard, JSC emphasizes the "relative value" of sports programming on distant signals has increased, and the relative value of movies and series programming has declined.[439] In support of this conclusion JSC points out that (1) superstations, all of which featured sports, were more important to cable operators in 1990-92 than in 1989, accounting for a larger percentage of the instances of carriage; (2) the sports on superstations was more attractive in 1990-92 than in 1989, thanks to the Chicago Bulls championships and the Atlanta Braves move from last place in 1990 to first place in 1991 and 1992; (3) Program Suppliers' own witnesses admitted the market for syndicated programming slumped between 1989 and 1990-92; and (4) in 1990-92 cable operators had more alternative sources for movies and series than they did in 1989.[440]

<u>Arguments in Opposition to Joint Sports Claimants' Claim.</u>

Program Suppliers argue there is no valid comparison between the fees paid by TNT for national, exclusive rights to an NBA package of games and JSC's entitlement to royalties. The minimal royalty fees set by Congress is a fact that limits all copyright owners.[441] Stern's testimony as to the increased fees for the NBA national package simply reflects that the number of cable subscribers grew from 4 million in 1979 to over 60 million in 1992.[442] JSC responds that the period of time cited by Program Suppliers is misleading because, while NBA's rights fees grew more than 200% from 1989-90 to 1992-93, TNT's subscriber base grew only 20%.[443] Further, Program Suppliers argue, the contract increases referred to by Stern involved either cable networks or commercial broadcast networks; none relate to sports carriage on television stations carried by distant signal. There are major differences between a package of NBA games licensed to a superstation and to a local station.

Program Suppliers further note the NBA master schedule for the 1990-91 season shows that approximately 70% of the games were available on regional cable sports networks and other local stations. The NFL sells all its games to the networks.[444] The NBA is the only sport to show a ratings increase during the period from 1980 to 1990.

Program Suppliers also suggest that the $900,000 per game paid by TNT in 1992-93 does not present a realistic picture of the fees paid by stations carried as distant signals. This is demonstrated by the fact that WGN in 1989-90 paid an average of $128,000 per game.[445] JSC responds that Program Suppliers have misleadingly compared the NBA's 1992-93 cable rights fees with the NBA's 1989-90 broadcast rights fees and that it also improperly compares the $128,000 per game fee paid by WGN in 1989-90 with the $900,000 per game fee paid by TNT in 1992-93. The 1989-90 per-game TNT fee ($333,000) was roughly twice the 1989-90 WGN per-game fee, reflecting the fact that TNT has about twice the national carriage of WGN. JSC also notes that the only data on cable network license fees is that which was provided by JSC and that data shows that cable networks pay substantially more for JSC programming than syndicated programming on a per hour basis.[446]

According to the Program Suppliers, the proliferation of regional sports networks has also reduced the value of distant signal sports.[447] JSC responds that Program Suppliers fail to mention the fact that the average subscriber had access to only one regional sports network, that substantial numbers of games each year were available only on distant signal, and that subscribers often had to pay a premium for regional sports networks while distant signals were available as part of the basic package. As an example, while one package of Chicago Bulls games was available to about two million subscribers on a regional sports network, an entirely different package was available to about 35 million households only on WGN as a distant signal.[448]

In response to JSC's evidence regarding the growth of superstations, Program Suppliers point out that only WTBS and WGN had increases while the other superstations declined.[449] There are a total of 59 flagship stations associated with professional sports teams. It would be fairly uncommon for a person who is far away geographically from a particular professional sports team to have a specific interest in that professional sports team. This is borne out by the relatively low carriage of flagship stations other than WTBS and WGN outside of their own region or an adjacent region. A sports program is typically of regional interest. Regional sports programming on the regional sports networks is generally available throughout the country. Responding, JSC points out that cable operators allocated two-thirds of their royalty payments to WGN and WTBS, and these two signals featured more sports programming than any other distant signal. According to JSC, the fact that WGN and WTBS were also the two stations with the largest increases in carriage and basic royalties confirms the importance of sports programming.[450]

Responding to JSC's "changed circumstances" argument, Program Suppliers note the fee generated data do not show a jump for sports.[451] They also note the "superstation" evidence does not prove anything because they are not the only sports flagship stations or the only distant signals that carry sports programming. It is thus impossible to make comparisons between sports and non-sports distant signals from this data.[452]

Responding to the fact that non-superstations have "clustered" in the geographic regions where the teams they carried are likely to enjoy their greatest popularity, Program

Suppliers point out that the regional distant carriage of sports competes against regional sports networks. The Cubs, for example, have a regional television station network on which Cubs games are available throughout the Midwest to approximately 3 million cable subscribers from a local station, not from WGN as a distant signal.[453]

Program Suppliers further contend that the prices paid by networks for programming does not offer a good indicator of the relative value of programming to cable operators and subscribers.[454] A table presented by JSC, which sets forth such prices, suggests that the 178 hours of NBA on TNT would be worth more to cable operators and subscribers than either The Family Channel or Nickelodeon. According to Program Suppliers, these "implausible results" highlight that the amount paid for programming by cable networks is, at best, a starting point.[455]

Analysis of and Award to the Joint Sports Claimants

Nielsen assigned a viewing share of 6-7% to JSC for the three year period. The Bortz surveys allocated to this category 36.3 to 38.8%. The Tribunal in the 1989 proceeding awarded 23.8% of the basic fund to JSC. JSC requests an award of 31 to 35% from the basic fund.

In addition to the evidence regarding the Bortz surveys, the JSC has provided corroborative evidence of the increased value of its programming. Much of JSC's evidence and arguments relates to the price of programming on cable networks. However, there is a major distinction between the sports programming on distant signal and that shown on the cable networks. Atlanta's WTBS is the largest of the superstations, provides 45% of the basic fund royalties, and broadcasts games of the Atlanta sports teams. WGN, the second largest of the superstations, provides 20% of the royalties and broadcasts Chicago professional teams. In addition, WTBS broadcasts Southeast Conference football. All the programming on these superstations and the other independent stations is essentially local programming and its value derives from the fans in those regions. The cable networks are national in scope and command more national attention than distant signals. The programming of these superstations does not compare to the more broadly based programming on cable networks. Also, some of the more heavily watched NBA and NCAA basketball games, the playoffs, are not on distant signals but rather on broadcast network stations.

There is little doubt that JSC is far more important than its viewing numbers would indicate. The question rather is, how much more important. How much would cable systems have to pay for the 6-7% of viewing as reported by Nielsen? JSC uses a viewing statistic of 4.3 to 4.8% of JSC-type programming on cable networks. JSC contends that in relevant open market transactions, JSC's programming on TNT and ESPN sold for five to six times its viewing value, which JSC contends translates to 32-

42% of the royalty fund. These statistics are direct evidence of supply and demand, supplementing the Bortz surveys. JSC programming is presented in very desirable time slots that make it more appealing to sports fans who are more loyal viewers than most television viewers.

We believe circumstances have changed in favor of JSC. The evidence shows an intense viewer interest in and desire for distant signal JSC programming and that the cost for that programming has increased. Considering all of the evidence, JSC has demonstrated that the market value of its programming has increased and its relative market value has also increased since 1989.

We allocate 29.50% of the basic fund to JSC for each of the three years, and an additional 0.30% for 1990 because the Canadians have settled their claim for that year.

3. NATIONAL ASSOCIATION OF BROADCASTERS

By the definition previously given, NAB holds the copyrights for programs that are produced by or for a U.S. commercial television station and broadcast only by that one station. Broadcast television stations produce a great variety of shows. This is illustrated by station KTVU which, during the years at issue, produced a weekly public affairs talk show, a weekly business/finance show, a sports highlights program, a coach's show, parade coverage, sports specials, a funniest home video program, documentaries, a health and exercise special, a celebrity interview program, a holiday cooking show, an interview special with combat jet pilots, a report on Gulf War soldiers at Christmastime, and a special on the importance of staying in school, together with a number of news programs, including a daily 10 P.M. newscast, weekday morning and noon newscasts, and weekend news.[456] Many stations produce programs educational in nature, some designed specifically for children. KTVU also sells news footage for national broadcast to CNN or the national broadcast networks.[457] Some of KTVU's station-produced programs went into syndication.[458] WTBS, by far the most widely carried superstation, and the only station programmed to be a national rather than a local station, produced a number of programs that would be of interest to viewers all over the country.[459]

Dr. Richard Ducey was presented as a witness by NAB. Dr. Ducey testified that the news and informational programming on the Cable News Network ("CNN") was similar in nature to station-produced programming.[460] CNN is licensed to cable operators for a monthly per subscriber fee. In 1990-92, CNN charged cable operators fees of $0.32, $0.33 and $0.35 per subscriber per month, respectively.[461] Using the license fees paid for CNN in 1990-92, Dr. Ducey calculated the following estimated royalty shares for station-produced programming:

1990	14.5%
1991	17.0%
1992	15.8%[462]

In accordance with the Tribunal's 1989 statement that it awarded shares higher than viewing percentages to claimant groups which had shown viewer intensity,[463] NAB presented testimony regarding subscribers' negative reactions when cable systems drop or threaten to drop distant signals, specifically the news and other programming produced by the station.

Dr. Ducey also testified that high viewer avidity for station-produced programming is also reflected in a comparison of subscriber valuation measures with measures of distant signal viewing.[464] Dr. Ducey compared certain quantitative evidence which was presented in the 1983 proceeding: the Nielsen viewing study and the ELRA cable subscriber survey.[465] The 1983 Nielsen study, as projected, showed that 7.24% of subscribers' distant signal viewing was to station-produced programming.[466] Dr. Ducey compared that figure to the 1983 ELRA cable subscriber survey which asked cable subscribers for a constant-sum valuation of distant signal program types. The survey reported that the relative value cable subscribers assigned to station-produced programming was over twice as much -- 17.1%.[467] By contrast, syndicated series had a higher Nielsen percentage than the relative value assigned in the subscriber survey (51.87% of viewing and 15.8% of value).[468]

Beta Research Corporation's 1992 survey of cable subscribers placed CNN at or near the top for the "valuation" and "satisfaction" questions and consistently above the mostly entertainment-programming networks of USA, TNT and Nickelodeon.[469] For the same year, CNN ranked seventh in terms of average total day ratings, below USA, TNT and Nickelodeon.[470]

NAB contends direct evidence of cable subscriber avidity for station-produced programming is contained in the Opinion Research Corporation survey ("the ORC study"), commissioned by WTBS in 1991.[471] The ORC study asked a sample of cable subscribers who received WTBS to rank a list of 63 programming attributes.[472] Over 1,200 subscribers completed the surveys.[473] The attributes of "keep you informed through newsbreaks," "programs that make you think," and "late night news" all ranked near the top in the subscribers' ranking of programming attributes.[474] NAB notes these attributes describe station-produced news and public affairs programming.

Dr. Ducey also testified about two areas of independent communications research that he says further demonstrate subscribers have avidity for news and other station-produced programming.[475] The first area is the field of "uses and gratifications" research. Research has shown that motives for watching television programming can be grouped into the categories of (1) instrumental, and (2) ritualized.[476] Instrumental viewing is associated with active, goal directed, and content-oriented viewing while ritualized viewing is associated with passive, habitual, and medium-oriented viewing.[477] Instrumental viewing is usually linked with high satisfaction on the part of viewers, but not with high viewing levels.[478] Dr. Ducey testified that news programming consistently falls under the category of instrumental viewing.[479] The Program Supplier witness Dr. Rubin, confirmed the fact that instrumental viewing is associated with news, talk, and magazine types of programs.[480]

Dr. Ducey also described research in the "parasocial interaction" field as providing further evidence that subscribers have avidity for news and other station-produced programming.[481] An example of this phenomenon would be a viewer thinking of particular newscasters as "friends" or taking an interest in their welfare and success.[482] Drs. Ducey and Rubin testified that research shows parasocial interaction of viewers with station newscasters.[483] The NAB introduced into evidence a number of letters to television stations exemplifying this phenomenon.[484]

Dr. Ducey further testified that the carriage pattern of distant signals provides indirect evidence of the avidity subscribers have for station-produced programming.[485] For the years 1990-92, 86-88% of the carriage for non-superstations was within 150 miles of the community from which the station was broadcasting.[486] Other than for WTBS, the superstation regional "clustering" was similar.[487] WGN in Chicago and WWOR in New York had 88% of their carriage within 150 miles. The figures for WSBK in Boston were 87%, KTLA in Los Angeles, 84%, WPIX in New York, 99%, and KTVT in Dallas, 100%.[488] NAB presented evidence that station KPLR in St. Louis was carried as a distant signal on 12 different cable systems in the Illinois and Missouri area and all were within 150 miles radius of St. Louis.[489] Similar evidence was presented regarding many other areas in the country.[490] The testimony was that the geographic clustering of distant signal carriage meant most cable subscribers were receiving news and other station-produced programming from stations that were relatively close by.[491]

Another pattern described by Dr. Ducey was that the vast majority of stations carried as distant signals were carried by cable systems that were in smaller viewing areas.[492] The station-produced news programming from regionally important cities or containing news relating to local sports teams, the state capitol and the weather, were of regional appeal to the areas in which the programming was retransmitted.[493] One such example is superstation WSBK, which is the flagship station for the Boston Red Sox, and was carried almost entirely in New York and New England, where there is an avid following of Boston sports fans.[494] Other examples of similar phenomena were provided.

NAB'S ARGUMENTS

On the "simulated market" issue, NAB contends the Panel must examine the marketplace that actually existed rather than basing its allocations on a hypothetical open marketplace. According to NAB, this is analogous to determining relative value in a "forced sale" situation.[495]

NAB also argues its analysis comparing the monthly per-subscriber fees charged to cable operators for CNN, with the royalties cable operators pay for distant signals, provided indirect corroboration of the Bortz results.[496] In addition, the Beta Research studies show that cable networks offering news and informational programming, such as CNN, consistently received higher rankings in subscriber satisfaction and interest than their viewing rankings.[497]

The Tribunal in 1989 awarded NAB less than either its viewing share, as shown by Nielsen, or its cable operator valuation share, as shown by Bortz, based on the Tribunal's findings that NAB had not provided corroborating evidence of the avidity of its viewers, or of license fees, or that its programming was a "special factor" to attract or retain subscribers, or of harm, or that increasing "clustering" of distant signal carriage involved station-produced programs.[498] NAB contends it has provided unrebutted evidence to address each of these factors and that it should receive an award based on the 12.4% shown in the Bortz survey.

On the subject of "avidity," NAB suggests the best evidence of this, as it relates to NAB's programming, is the fact that the Bortz surveys themselves demonstrate that cable operators value station produced programs out of proportion to their viewing figures. In addition, it notes the other evidence it introduced which demonstrates subscriber "avidity."[499]

On the "license fee" issue, NAB points to its evidence that the analogous CNN license fee is higher than those for a number of other types of channels and thus provides some indirect evidence of "valuable license fees" being paid for the type of programming that characterizes NAB's claim.[500]

On the "clustering" issue, NAB contends its analysis demonstrates a continuing increase, through 1992, in the number of distant signals carried within 150 miles.[501] The Nielsen measure of viewing of station-produced programming increased between 1990 and 1992, further demonstrating the value of such programming.[502]

Arguments in Opposition To NAB'S Claim

In response to the NAB's evidence, Program Suppliers first contend that NAB's license fees comparison overstates the comparable share of royalties to PTV and NAB by substituting a much higher rate from the cable networks for the actual amount paid to receive PTV or local programming.[503] This calculation makes no sense because it substitutes free market cable network fees for one party and keeps everyone else locked into the compulsory licensing arrangement. Program Suppliers note their exhibit[504] which used the same methodology to calculate hypothetical shares for the syndicated program category based on the per subscriber fees paid for USA and Nickelodeon. The results of those calculations show that the hypothetical shares for syndicated programs would be greater than the entire royalty fund. NAB responds that it was not urging that its license fee comparison be used to determine allocations from the royalty fund but merely as a basis for comparison, showing that NAB's programming would command a relatively higher royalty share based on the same analysis as used by PTV in its direct case.[505]

Program Suppliers further contend there is no evidence to support the NAB's theory that distant signal news has low viewership but high value. They suggest that the low viewership is probably more easily explained by a lack of interest on the part of distant subscribers in local events occurring far away, i.e., why would a Los Angeles subscriber care about Chicago weather?[506] NAB responds that overall, with the exception of WTBS, between 84% and 100% of the distant subscribers receiving the top six superstations were located in the same region as the station or in an immediately adjacent region, and, further, that none of WTBS' station-produced programming is so focused on local Atlanta affairs that it might be even arguably unappealing to distant cable operators and subscribers.[507]

According to Program Suppliers, the NAB's theory that programs with high viewership have relatively low valuations for cable operators because there are so many similar programs on broadcast signals is similarly bereft of any empirical support. The same is true of the NAB's claim that there is no correlation between viewing studies and willingness to pay for programs by subscribers.[508]

Program Suppliers next argue the NAB's evidence regarding the "clustering" of distant signal carriage to demonstrate the greater interest in station-produced news and programming should be given little if any weight. First, the evidence excluded carriage of the five most widely carried superstations which accounted for 53-55% of carriage and 75-80% of royalties in 1990-92. In addition, while the percentage of clustering has remained about the same, the absolute instances of clustering dropped "precipitously" between 1989 and 1990-92.[509]

Program Suppliers similarly dispute the NAB's theory that programming locally produced by network affiliates is more attractive to subscribers than the programming carried on independent stations, as evidenced by the fact that network affiliates made up a greater percentage of the instances of carriage than non-superstation independents. Program Suppliers point out that when the superstations are included in the comparison, the percentage of instances of carriage of network affiliates is not all that substantial.[510]

In response to the NAB's profiling of the distant signal carriage of select U.S. broadcast stations to demonstrate the regional nature of their carriage and, hence, the assumed interest in station-produced programming, the Program Suppliers point out that independents in the same markets produce more carriage and more royalties than the stations selected by NAB. Thus, concludes the Program Suppliers, the independents, which carry more series and movies and less station-produced, local programs, are in greater demand.[511]

As for the NAB's evidence regarding viewer avidity for local programming, the Program Suppliers contend NAB ignores the fact that viewer avidity is found in high rated programming, particularly syndicated series and movies. Program Suppliers contend Nielsen ratings reflect intensity insofar as they show the extent to which viewers watch programs regularly.[512] NAB responds that Program Suppliers miss the point. NAB does not argue its viewers are more avid than Program Suppliers; rather, it argues its evidence shows that the avidity of its viewers impels cable systems to respond to them out of proportion to their actual viewing.[513]

In response to the NAB's evidence regarding ritualized and instrumental viewing, Program Suppliers point out no evidence was offered to show that any one category has a greater share of instrumental viewing than does any other program category. Further, NAB's witness agreed that the phenomenon of "parasocial interaction" applies to personalities on program categories other than local news.[514]

Analysis of and Award to the NAB

Nielsen assigned a viewing share of 7 to 8% to NAB for the three year period. The Bortz surveys allocated to this category 11.9 to 14.8%. The Tribunal in the 1989 proceeding awarded 5.70% of the basic fund to NAB. NAB requests an award of 12.6% from the basic fund.

Considering the view that a central concept in determining market value is attracting and retaining subscribers, the question is what part does NAB assume in doing so? The Tribunal in 1989 found viewer intensity not as high for NAB as for other claimants and although it increased NAB's allocation, that allocation was still below both the Bortz and Nielsen figures.

NAB relies substantially upon the Bortz survey. As stated previously, we find Bortz highly valuable in determining market value. However, in contrast to JSC, NAB does little to corroborate Bortz. While apparently valued by cable system operators, the viewing statistics of between 7 to 8% shown by Nielsen for NAB programming do not support Bortz. NAB presented evidence of analogous market data comparing CNN which we related above. The Panel finds the comparison to be overstated for the reasons given by Program Suppliers which render this evidence of little value.

NAB responds to the Tribunal's previous criticisms of its claim, most significantly to "viewer avidity." There is evidence from the Opinion Research study that we find persuasive. That study highly valued programs that "make you think" and "late night news." We also credit NAB's evidence of strong attachment to news programs and personalities. There was also persuasive evidence that news programming from distant signals from the same state or from a larger market was particularly important.

Nonetheless, we do not find a change of circumstances for NAB's claim from the time of the last proceeding. The same type of evidence was presented by NAB in the 1989 proceeding. However, in our judgment, NAB's programming was previously undervalued. In our estimation there was more of a demand for NAB's programming than the Tribunal previously recognized. We believe NAB attracted and retained subscribers at a level equal to its viewing.

We allocate 7.5% of the basic fund to NAB for each of the three years, and an additional 0.08% for 1990 because the Canadians have settled their claim for that year.

4. PUBLIC TELEVISION CLAIMANTS

The Public Television Claimants (PTV) urge that the Bortz survey results, with an adjustment, should be given controlling weight by the Panel. In addition, PTV contends that in making its award the Panel should further adjust the Bortz values to account for the fact that PTV does not participate in the 3.75 fund and must receive all of its share from the Basic fund.

The uniqueness of PTV programming, arising from its non-commercial educational objectives, wide range of innovative programs and heavy mix of original first-run productions which are expensive and require years of research and development, dovetails closely with the need of cable operators to offer programs appealing to a variety of subscriber interests. About 21 percent of all Form 3 cable systems carried one or more PTV distant signals during the years 1990-1992. Approximately 2.1 million households, or roughly 4.5% of all U.S. cable households, received their only PTV signal by distant retransmission, and another 5.6% of U.S. cable households received their second PTV signal by distant retransmission during this period.[514] During each of those years, PBS distributed approximately 3,200 hours of programming, of which more than 1,600 hours were original, first-run programming.[515] The total cost of those programs increased from $258 million in 1990 to $301 million in 1992, and local PTV station programming expenditures rose from $279 million in 1990 to about $300 million in 1991 and 1992.[517]

PTV presented evidence of special factors that made its programming more valuable in 1990-1992 than in prior years. Significant new programming and promotional initiatives were commenced in 1990 under a newly-formed National Program Service of PBS, which placed increased emphasis on shows of special interest to television viewers and the uniqueness of PTV in comparison with "look-alike" cable networks such as Arts & Entertainment and the Discovery Channel.[518] A major programming effort called Children's Initiative, aimed at upgrading children's programming offered by PBS, made several new children's series available in consultation with educational experts,[519] appealing to parents who prefer to avoid exposing children to heavy advertising.[520] Such programming is important to cable operators in attracting and retaining subscribers.[521]

As quantitative measures of marketplace value, PTV relied on the Bortz survey and on three other, independent measures corroborative of the adjusted Bortz results. The Bortz survey (before adjustment) showed steady and substantial increases in PTV's relative value shares. Moreover, the Bortz respondents finding PTV programming "most popular" and used for promotional or advertising purposes also increased significantly:[522]

	1989	1990	1991	1992

Relative Value	1.3%	2.7%	2.9%	3.0%
Most Popular	1.1	1.6	5.3	7.3
Promotional Use	0.7	2.8	3.4	8.1

Dr. William B. Fairley, President of Analysis and Inference, Inc., a research and consulting firm, presented an analysis designed to adjust the Bortz values to correct for the underrepresentation of PTV found by the Tribunal in 1989 to arise from the Bortz methodology's automatic assignment of a zero value to PTV programming if the respondent did not actually carry a PTV distant signal during the survey year. The Tribunal had found, as early as its 1983 decision, that the fact that a cable system did not carry a public television signal meant only that the actual price (compulsory license fee) was too high, whereas there could have been some lesser price that respondent operators were willing to spend. This was not a fault in the Bortz survey design, the Tribunal found, since asking respondents to value a program category which they did not carry would have caused confusion, but nevertheless required an adjustment. The Tribunal applied a multiplier of 1.2 based on the ratio of program categories considered by those carrying a PTV distant signal compared to those not carrying one.[523]

Dr. Fairley testified that such an adjustment was reasonable, because a cable operator could obtain PTV programming only by importing an entire signal unlike commercial programming that ordinarily includes a mix of commercial program categories. However, he found that the Tribunal adjustment did not adequately correct for the understatement and applied a statistical method based on the principle of estimating for "missing data" which he described as more rigorous. He found that the "threshold value" at which a cable operator would carry a distant PTV signal could be estimated at the average of the smallest share reported by each cable operator that did in fact carry a distant PTV signal during the survey year, averaged over all survey respondents, to which he then applied a statistical technique called "maximum likelihood estimation" to compute the average PTV share value for respondents that did not carry such a signal. The results of Dr. Fairley's analysis were the following adjusted PTV share values:[524]

1990	1991	1992
6.1%	6.3%	5.7%

Mr. Bortz acknowledged that a cable operator might assign a value to PTV programming even though it carried no PTV distant signal during the survey year, but had adhered to his zero-value methodology to avoid ambiguity in his survey results.[525] Earlier surveys of cable operators, conducted for the 1978, 1979 and 1980 proceedings, asked respondents to provide a relative value for PTV programming even if they had not carried a PTV signal during the survey year. PTV's share of relative value in those studies ranged from 4.9% to 7.0%. Only in 1983, when the zero value methodology was adopted, did PTV's share drop significantly.[526]

The three independent measures corroborating the adjusted Bortz results were data on instances of carriage, an analogy to license fees charged for the Arts & Entertainment cable network, and 1993 studies of estimated license fees (Hecht/Kagan Study). Instances of carriage for PTV distant signals increased between 1989 and 1992 from 6.7% of all distant signals to 7.3%, and from 7.4% of basic signals to 8.0%.[527] Only PTV and the three original superstations experienced a growth in distant carriage over this period.[528] These data have particular significance for PTV because a cable operator decision to import PTV is an affirmative action to import an entire programming category, unlike distant commercial signals.

John W. Fuller, Director of Research for PBS, presented an analogy to license fees paid by cable operators for Arts & Entertainment, a cable network with "look-alike" programming that overlaps substantially with PTV's but includes far less original, first-run productions. Applying A&E license fees to the subscriber instances of carriage of PTV signals for 1990-1992, with a deflating adjustment to reflect loss of cable operator advertising revenues, the estimated "licensing revenues" for a PTV distant signal carried in lieu of A&E would be:[529]

	1990	1991	1992
PTV % of Basic Fund	6.6%	6.8%	7.7%

While this analogy is not perfect, it illustrates a marketplace value for distant signal PTV programming that is close to the adjusted Bortz results.

A third quantitative corroboration was also presented by Mr. Fuller, based on a study by Norman Hecht Research, Inc., prepared in 1993 for NAB, of the potential license fees that broadcast stations could expect from cable operators. The Hecht study involved a survey of cable subscribers to two large Form 3 cable systems in a single "top ten" market. The results of that survey had then been translated by Paul Kagan Associates, Inc., a respected cable industry consultant, into estimated "license fees" that broadcasters could be expected to charge based on the Hecht results. The Kagan study was published in the trade press in 1993. Mr. Fuller multiplied those estimated license fees by the number of cable subscribers who received their first, second, or third (or more) PTV signal by distant retransmission, to derive a percentage royalty award for the years 1990 to 1992 (after adjusting to deflate for increases in license fees over the period). The results were:[530]

	1990	1991	1992
PTV % of Basic Fund	6.6%	6.8%	7.7%

Again, the results are close to the adjusted Bortz results for PTV.

PTV also contends that a further adjustment should be made in its award because its total share of the adjusted Bortz values must come entirely from the Basic fund, and the Bortz survey does not differentiate between the Basic fund and the 3.75 fund in which PTV does not participate. With pro rata adjustment for other claimants, PTV's relative share would then be 8.1 % in 1990, 8.3% in 1991, and 7.5% in 1992.[531] However, PTV's claim in this proceeding is 7% of the Basic fund for each of the three years at issue.[532]

Only Program Suppliers and the Canadian Claimants opposed PTV's claim, as they opposed any reliance on the Bortz survey. Program Suppliers assert that PTV's evidence largely disguises a claim based on quality of programming which has been rejected by the Tribunal as a criterion,[533] that the increase in "look-alike" cable networks has further eroded PTV's value in the cable marketplace, that PBS relies upon viewing data by altering its schedule to offer attractive programming and avoid fundraising drives during Nielsen sweeps periods, that the adjustment proposed by Dr. Fairley has no factual basis, and that none of the independent corroborative data presented by Mr. Fuller has any weight. Program Suppliers would have the Panel rely on Nielsen data as useful indicators of value.[534] That data showed a viewing share of 4% for PTV in the four sweeps months of 1990, and full year viewing of 2% in 1991 and 4% in 1992. (It is not disputed that the 1991 Nielsen data for PTV are substantially incomplete.[535] The automatic-zero adjustment is merely speculative as there is no benefit or harm and therefore no marketplace value in <u>not</u> carrying a distant PTV signal, and Dr. Fairley's analysis fails to consider that among Bortz respondents that <u>did</u> carry such a signal, roughly 20% nevertheless assigned a zero value to PTV. The Canadians contend that Dr. Fairley's "missing data" analysis is unsuitable where no such data existed to be replaced.

Both Program Suppliers and Canadians observed that instances of carriage are not of equal value, and that percentages or averages of royalties paid are far more significant, particularly in light of the relatively low DSE rate accorded PTV. The analogy to A&E license rates is weak because the actual rates are generally only about two-thirds of the "top of the rate card" fees,[536] and to similarly substitute analogous free market cable network fees for all parties would produce a total amount well above the total royalty payments. PTV replied that the A&E analogy is primarily an illustrative proxy that has weight as an independent confirmation of the Bortz results. The Hecht/Kagan Study was termed irrelevant by Canadian Claimants and criticized by Program Suppliers as based on a survey of only local subscribers, not distant signal viewers.

Analysis of and Award to the PTV

Nielsen assigned a viewing share of 2 to 4% to PTV for the three year period. The Bortz surveys allocated to this category 2.7 to 3.0%. The Tribunal in the 1989 proceeding awarded 4% of the basic fund to PTV. PTV requests an award of 7% from the basic fund.

The Tribunal found in its 1989 decision that by every measure PTV had declined in its proportional share of the distant-signal marketplace since 1983.[537]

By all available comparable measures, PTV's share of the marketplace has increased since 1989. Their Nielsen viewing data increased from 3.074% in 1989 to 4% in 1990 and 1992, with only the incomplete 1991 data below that level. Their unadjusted Bortz survey result increased from 1.3% in 1989 to 2.7% in 1990, 2.9% in 1991 and 3.0% in 1992, with even greater increases in the Bortz results for program popularity and promotional or advertising uses of PTV programming. Instances of carriage increased between 1989 and 1992 from 7.4% of basic signals to 8.0%.

Such consistently impressive quantitative results cannot be disregarded as reflecting merely the rejected criterion of quality per se, any more than the Tribunal could disregard the decline in those measures between 1983 and 1989. The Tribunal then agreed that the perception of quality by cable operators may be recognized as a factor inducing them to import PTV signals. Whether called quality or niche programming, PTV's rebound since 1989 is shown by every objective measure. The A&E analogy is overstated for the reasons give by Program Suppliers, but even allowing for defects in reliance on instances of carriage data, analogy to A&E license fees and applicability of the Hecht/Kagan survey results, those comparisons are likewise consistent with PTV's resurgence since the last distribution proceeding. As a credible explanation, nothing in the record contradicts the substantial evidence of new programming and promotional initiatives undertaken by PBS commencing in 1990. The increased entry of "look-alike" cable networks, rather than eroding PTV's share of the distant signal marketplace, with at least equal likelihood reflects perception of a valuable niche market established by PTV with potential for yet further expansion.

The automatic-zero adjustment proposed by Dr. Fairley troubles the Panel. Methodology aside, there appears little to distinguish PTV in this regard from other claimants that also were not carried at all by many respondents in some of the Bortz survey years. No other claimant has sought such an adjustment, although Canadian Claimants, who vigorously oppose any reliance on the Bortz survey results, have provided in their post-hearing briefs a comparable calculation apparently made by their counsel to satisfy any "curiosity."[538] PTV program importation involves an entire distant signal, unlike all other program categories except Canadian, but the zero value accorded PTV by 20% of the respondents that did carry a distant PTV signal warrants closer examination. For immediate purposes, since no considerations have been presented that were not presented or available to be presented to the Tribunal, which addressed the subject explicitly in both its 1983 and 1989 determinations, we adhere to that Tribunal's allowance of the adjustment. No party having presented any alternative to Dr. Fairley's methodology, we accept it for purposes of this proceeding.

PTV's proposed further adjustment to allow for its non-participation in the 3.75 fund is rejected for the same reason given by the Tribunal in the 1989 proceeding.[539] Mr. Bortz specifically disavowed any intention or implication in his survey to have respondents answer based on their royalty payments.[540]

We allocate 5.75% of the basic fund to PTV for each of the three years, and an additional 0.06% for 1990 because the Canadians have settled their claim for that year.

5. THE DEVOTIONALS

In addition to the Bortz survey, the Devotionals presented other evidence which they claim corroborates the high market value of their programming.

Dr. David Clark, President of KMC Media, a witness for the Devotionals, testified regarding the religious programming that was available on broadcast stations carried as distant signals. For example, superstation WGN carried a block of religious programs.[541] Thomas Larson, another witness for the Devotionals, explained that Devotionals programming was also broadcast on religious "specialty stations" carried by cable systems as distant signals.[542] Some of the programming was telecasts of traditional religious services, other programs include The 700 Club, co-hosted by Pat Robertson and Ben Kenchlow, and children's programming such as "Superbook" and "The Flying House."[543] Robertson testified that these programs are not mere entertainment -- "they frequently speak to the center of peoples' concerns and being."[544]

The Devotionals also presented evidence demonstrating the avidity of their viewers. Dr. Clark testified that many viewers of religious programs have unusually intense loyalty to and interest in religious programming, and their decisions to purchase cable subscriptions are strongly influenced by their desire to obtain religious programs.[545] Viewers of the

Devotionals programming were willing to make voluntary contributions to the producers of those programs. For example, contributions to The 700 Club alone were more than $88 million in 1992.[546] This demonstrates the viewers' commitment to the programs.[547]

Thomas Engel testified that cable operators were aware of the value of religious programming on distant signals as part of their effort to attract and retain subscribers.[548] Engel's experience in the cable industry has shown that there is a universal demand for religious programming throughout the United States. Stanley R. Searle, a multiple system owner in Southern Colorado, testified that half or more of his subscribers believe the systems should carry stations with some religious programs and that it is the unique appeal of sports and religious programming that justified his importation of a distant signal from Denver.[549]

It was testified that the value of religious programming is demonstrated by the carriage of religious "specialty stations." These are stations whose programming consists of religious programming for both one-third of their total broadcast weeks and one-third of their prime time offerings.[550] The 43 religious "specialty stations" which were carried as distant signals, generated the following royalties, as calculated by Cable Data Corporation:

YEAR	AVERAGE NUMBER OF SUBSCRIBERS	ROYALTIES
1989	820,641	$ 867,082
1990	984,161	747,850
1991	1,380,719	1,286,189
1992	1,367,221	1,451,617
1993	1,811,539	2,182,670[551]

Cable operators serving approximately 22 million homes chose to carry a cable network known as VISN or "Faith and Values," which was virtually all religious programming.[552] In addition, cable operators serving approximately 63 million homes were also willing to pay for the right to carry the Family Channel.[553] The Family Channel carried The 700 Club in prime time five days a week and also contained a substantial amount of other religious programming.[554]

Devotionals' Arguments

Devotionals contend the best evidence of marketplace value is the Bortz survey. Bortz measures the correct variable. The Nielsen results do not correlate with the preferences of viewers to subscribe or to retain their subscriptions to cable.[555] In addition, the viewing figures themselves are unreliable.

Devotionals argue the results of the Bortz surveys are confirmed by the other evidence described above, much of which, they say, was offered for the first time in this proceeding. This other evidence demonstrates that cable operators are significantly benefitted by distant signal retransmission of Devotional programming.[556] They further contend cable operators maximize their revenues by seeking to attract and retain subscribers and this is done by providing a programming mix that will have special appeal to discrete and diverse niches of the universe of potential subscribers; cable operators use religious programming to capture niche subscribers.[557] The evidence demonstrated that the niche market for religious programming existed throughout the United States.

Devotionals also point to the evidence showing the growing royalties attributable to the carriage of religious "specialty" stations during the years at issue here.[558] They further emphasize the unusual loyalty of their viewers which is demonstrated in part by their willingness to make voluntary contributions to the ministries that produce the programs.[559]

Devotionals note the Tribunal's 1989 award to them was a share "far below" the Bortz survey result because the Tribunal believed "the price of such programs is much less than what the cable operator is willing to spend."[560] They contend the evidence in this proceeding specifically addresses this point and demonstrates that, in the cable marketplace, Devotional programming would generate a market price much as other programming. They contend that in the hypothetical open market, they have already accomplished their goal of having advertising-Oree programming and they would "negotiate up" to the cable operator's value of programming in attracting and retaining subscribers.[561]

Arguments in Opposition to Devotionals' Claim

The Program Suppliers criticize the case presented by the Devotionals. They point out that the Devotionals rely solely on the Bortz survey and have not offered any other "quantitative, useable evidence."[562] With respect to Larson's testimony comparing the average number of subscribers and royalty fees generated for religious specialty stations for 1989 through 1992, other claimants argue that no guidance is provided regarding how this information is to be translated into the relative value of the Devotionals' programming.[563] They also note that the "specialty station" royalties for the three years at issue represent less than 1% of the total royalty pool, and are thus consistent with Devotionals' low viewing shares.[564] Other claimants further contend the Devotionals' evidence about the "quality" of devotional programming and about "viewer interest" in their programs cannot be quantified and is not beneficial to this Panel.[565] Finally, Program Suppliers point out that the Devotionals pay stations for air time and argue this practice indicates a lower value for devotional programming compared to other programs.[566]

Analysis of and Award to the Devotionals

Nielsen assigned a viewing share of 1% to Devotionals in the years it measured this category. The Bortz surveys allocated to this category 3.8 to 4.3%. The Tribunal in the 1989 proceeding awarded 1.25% of the basic fund to Devotionals. Devotionals request an award of 3.5 to 4.0% from the basic fund.

The Devotionals' basic claim is rooted in the Bortz results and supported by the argument that they provide niche programming to very "avid" viewers. The evidence supporting the claim is anecdotal or individual opinions, not quantified and/or not related to Devotionals' proportionate share of the royalty fund. Assuming that broadcasters accept payment for Devotional programming to offset absence of advertising revenues, we have no data on the amounts of such payments. Moreover, the question before the Panel is program value to cable operators, not to broadcasters. Our reservations concerning the Bortz surveys are particularly acute here. The lack of evidence of any price demanded by sellers is compelling. The Tribunal in 1989 found, as we do also, that the price of the programs is much less than what the cable operator is willing to spend. The cable operator's assessment is not supported by any new, persuasive evidence of avidity. We find no change in circumstances.

We allocate 1.25% of the basic fund to Devotionals for each of the three years, and an additional 0.01% for 1990 because the Canadians have settled their claim for that year.

6. CANADIANS

The Canadian claimants, cable systems near the Canadian border on both the east coast and west coast principally, carry Canadian broadcast stations as distant signals. The claim is for non-U.S. programming and includes both Canadian network and local programs of every type. The Canadians' claim does not include the programming that is part of the JSC claim. That is, it does not include the National Hockey League games, the Toronto Blue Jays and Montreal Expos Major League Baseball games. It also does not include programs encompassed by the Program Suppliers, that is, United States off-network syndicated series and movies.[567]

The Canadian Broadcasting Corporation (CBC) operates two national television networks, one in English referred to as CBC and one in French, referred to as Société Radio-Canada (SRC).[568]

The majority of the programming broadcast by CBC was produced in Canada. In 1990-91, 82% of CBC's prime time programming was Canadian. In 1991-92, the percentage rose to 89% and in 1992-93, it was 86%.[569] News is a very vital and important part of the English network. CBC carries national, regional and local news.[570] It carries a broad range of sports in addition to those previously mentioned.[571] It produces its own movies, arts and programs of general interest.[572]

The French network, SRC, also has much of its programming produced in Canada (86% of prime time programming in 1990-91, 84% in 1991-92, and 83% in 1992-93).[573] The remainder of the French broadcast programming comes from different countries.

For private Canadian network stations, 25-50% of the programming hours are included in the Program Suppliers' claim and they are not compensable to the Canadians.[574] For CBC network stations, approximately 25% of the programming is encompassed by NAB's claim. The same is true for the sports that are part of the JSC claim.[575] An exhibit introduced by the Canadians demonstrates that the Canadian stations with predominantly Canadian content are responsible for the lion's share of subscribers and fees generated by Canadian signals.[576] In 1991, the stations carrying the highest percentage of Canadian content are responsible for generating over 80% of the total fees and attracting almost 80% of the subscribers.[577] Canadian programming fills a unique niche in the channel line-up offered by U.S. cable systems along the Canadian border.

Three French language Canadian television stations were re-transmitted as distant signals by over 20 cable systems during 1991 and 1992. Several systems carried more than one of these stations. These systems had a total subscriber population of approximately 380,000 households.[578]

Dr. John E. Calfee, presented as a witness by the Canadians, testified that a feature unique to the Canadian claimants is the fact that Canadian programming emanates from signals that carry relatively little non-Canadian programming.[579] Cable operators are expressing a demand for Canadian programs when they import Canadian signals. This suggests that the proportion of all fees paid for importing Canadian signals offers a superior starting point for allocating these fees to programming types.[580]

The total royalties paid by U.S. Form 3 cable systems for the carriage of Canadian distant signals for the years 1991 and 1992 was $5,471,794.[581] This amounts to 1.95% of all basic royalties.

The Canadians retained Cable Data Corporation ("CDC") to allocate the total basic royalties paid by a cable system pro rata to each of the distant stations carried according to the distant signal values of the stations. The calculation of the royalty fees by CDC is approximately the midpoint in a narrow range of what cable operators actually paid for distant Canadian signals.[582] For the combined years 1991-92, the average amount of basic royalties paid to carry Canadian distant signals, when using the methodology of CDC, was 1.95%.[583]

The Canadians also presented the Ford/Ringold survey of U.S. cable systems carrying Canadian distant signals. In the years 1991-94, Drs. Gary Ford and Debra Ringold conducted a study of the U.S. Form 3 cable systems which import English-language Canadian programming and the systems which import French-language Canadian programming.[584] Dr. Ringold is Associate Professor of

Marketing at Willamette University. The purpose of the study was to estimate the value of Canadian programming on Canadian distant signals retransmitted by Form 3 cable system operators in the U.S.[585]

The 1991 and 1992 surveys asked about the value of six different types of programming carried on a randomly chosen Canadian signal retransmitted by the cable system:

1. National Hockey League hockey and Major League Baseball;
2. Canadian-produced news, public affairs, documentaries and other programs produced by the station;
3. U.S. syndicated series and movies;
4. Canadian-produced sports programming such as Canadian Football League games, skating, skiing and tennis;
5. Canadian-produced arts and variety, drama, children's and other entertainment programming; and
6. Other programming.[586]

The 1993 and 1994 surveys introduced Canadian-produced children's programming as a separate and seventh programming category.[587] English-signal response rates ranged from 68% to 78%. French signal response rates ranged from 63% to 90%.[588]

The respondents were asked what percentage, if any, of the total value of programming carried on [station's call letters] is accounted for by each of the categories listed above.[589] The survey results indicated that cable system operators retransmit the Canadian signals primarily for their unique Canadian programming rather than for NHL hockey and Major League Baseball or U.S. syndicated shows and movies already available on U.S. television.[590]

Beginning in 1992, respondents were asked their reasons for carrying the distant signals which were surveyed. An average of 81% of the respondents in 1992-94 agreed their system needed to carry an English-language Canadian signal in order to attract and retain subscribers.[591] An average of 68% agreed as to a French-language Canadian signal.[592]

The combined French and English results over the four year history of the study reflects cable operators gave 56.09% of the value to Canadian programming, 29.06% to NHL hockey and baseball and 15% to U.S. series and movies.[593]

David Bennett, Business Affairs & Corporate Development, Canadian Broadcasting Corporation, testified that in 1983, the carriage of Canadian distant signals accounted for 2.1% of the total. In 1992, the instances of carriage of Canadian distant signals amounted to 1.2%.[594]

<u>The Canadians' Arguments</u>

The Canadians argue that the continued carriage of Canadian signals by U.S. cable systems, and the payment of royalty fees for those distant signals, is a strong indicator of the signals' value. This is actual behavior - people making business decisions.

The Canadians take a unique position among the claimants in their proposed method for determining their award. They propose that this Panel first determine the amount of royalties that were paid for the carriage of distant Canadian stations, and, second, divide those royalties only among the three groups of claimants (Canadians, Program Suppliers and JSC) whose programming was actually carried by Canadian stations according to the relative values of each group's programming.[595] They argue that during 1991-92, 1.95% of all basic cable royalties were paid specifically for the carriage of Canadian stations.[596] Of those royalties, the Canadians claim no less than 56% and up to 100% or a minimum of 1.1% up to 2.0% of all basic fund royalties.[597]

Canadians further contend the "depth, breadth, quality and quantity" of their programming benefits cable operators who must offer their subscribers a variety of programming.[598] They point to the Tribunal's 1983 decision where the Tribunal stated, with regard to the Canadians' claim, "a nexus to marketplace value is still needed that is greater than already recognized and reflected in past awards."[599] The Canadians claim they have provided four types of evidence of market place value: First, the royalty payments paid for all Canadian stations. Second, content data showing most of the programming on Canadian stations is Canadian and that stations with more Canadian content are carried more and generate more royalties. Third, cable networks, which are the relevant marketplace, are eager buyers of Canadian programming. Fourth, their cable operator studies showing that cable operators credit Canadian programming with most of the value of Canadian stations.[600]

The Canadians further contend they demonstrated that in 1991-92, Canadian programming constituted the majority of the programming on Canadian distant signals. In addition, much of the American programming was simulcasts of U.S. series and broadcasts which are available on the U.S. network stations. Those U.S. programs thus provide no additional value to cable operators.[601]

Arguments in Opposition to the Canadians' Claim

Program Suppliers note that in both the 1980 and 1983 proceedings the Canadians were awarded 0.75% of the basic fund. Here, the Canadians seek twice that amount despite the fact that the instances of distant cable carriage of Canadian-produced programming since 1983 has dropped by nearly 50%.[602]

Program Suppliers further argue the Ford-Ringold survey has both methodological and conceptual problems which render its conclusions unreliable.[603] They note that the survey frames the "value" of distant signal programming in terms of the cable operator's impression of its ability to attract or retain cable system subscribers but it does not measure subscriber opinions.

Program Suppliers argue Canadian programming is not valued as unique and that there is no interest in French programming.[604] The Canadians respond that the testimony of numerous witnesses demonstrates that Canadian programming is different, original, distinct, and unique - particularly the French-language programming,[605] and that other many other witnesses testified to the value of "niche" programming to cable operators. Significantly, the Program Suppliers agree that a "logical starting point" to evaluate how much the Canadians should be awarded would be the royalties paid for their signals.[606]

PTV disputes the contention that the Canadians' award should be based on the amount paid in royalties for distant Canadian signals. PTV points out this approach is not based on the relative marketplace value of different distant signal programming.[607] PTV also disputes the Canadians' characterization of their calculation of ranges of payments as being "sufficiently specific" to allow an award to be made on that basis. PTV notes that the difference between the maximum and minimum points in the Canadian range, one percentage point, is greater than the total royalties ever awarded to the Canadians in past proceedings. (One percentage point in this proceeding is worth approximately $5 million.)[608] PTV further points out that under the statutory royalty structure, a cable operator does not have to decide how much it is willing to pay to import a particular distant signal. The operator pays a fixed fee that could be substantially less than what it is willing to pay to import the particular distant signal.[609]

Analysis and Award to Canadians

The Bortz surveys allocated to the Canadians 0.3 to 0.5% in the years 1991-92. The Tribunal in the 1989 proceeding awarded 0.75% of the basic fund to the Canadians. The Canadians request an allocation between 1.1 and 2% from the basic fund. Their claim encompasses only the years 1991 and 1992. They settled their claim for 1990.

Cable system operators specifically carry either the Canadians or PTV. Claimants in all other categories have their programming presented by the superstations and all others in what has been referred to as a "bouquet," a mixed combination of programming. The Canadians argue, therefore, they can determine exactly what was paid for their programming and request that allocation. In this case it amounts to 1.95% of the basic cable royalties. There is one refinement to this calculation. After making that determination, the percentage of the programming for major league baseball, national hockey league games, U.S. college and team sports, and other programs owned by U.S. copyright owners must be deleted. The claims of the sports and other U.S. owned programs are encompassed by JSC or Program Suppliers. More specifically, the Canadians claim that approximately 1.95% of all basic royalties is for the carriage of Canadian stations. Of that number, JSC should receive 29%, Program Suppliers should receive 15%, and the balance (56%) should be allocated to the Canadians. This 56% is equal to 1.1% of the basic royalties.

The Panel believes that the analysis for this category should be the same as for the other categories. The Bortz survey shows cable system operators value Canadian programming at .3%. This number is totally unreliable as Mr. Bortz suggests that the small numbers are incapable of being accurately measured. The other quantitative evidence we have is fees generated. While there is a great deal of criticism, particularly by PTV, concerning acceptance of the fee-generated method, we see no other significant evidence to dispute the claim of the Canadians.

We allocate 1% of the basic fund to the Canadians for the years 1991 and 1992.

VI.

THE SYNDEX AND 3.75 FUNDS

There are two other funds to be distributed. The only claimant to the Syndex fund[610] is the Program Suppliers and they are consequently awarded 100% of that fund.

The 3.75 fund established a royalty rate of 3.75% of gross receipts for newly permitted distant signals. Little new argument is made concerning its distribution. PTV is not a participant in this fund. We make these awards in a similar basis as the Tribunal in 1989. The allocations are as follows: Program Suppliers 58.6%, JSC 32.6%, NAB 7.5%, Devotionals 0.95 and Canadians 0.35.

SUMMARY

The allocations are as follows:

	1990 (Percent)	1991-92 (Percent)	3.75 (Percent)	Syndex (Percent)
Program Suppliers	55.55	55.00	58.6	100
Joint Sports Claimants	29.80	29.50	32.6	
Commercial Television	7.58	7.50	7.5	
Non-commercial Television	5.81	5.75	--	
Devotional Claimants	1.26	1.25	0.95	
Canadian Claimants		1.00	0.35	

The majority is submitted and certified by:

Mel R. Jiganti, Chairperson

Ronald P. Wertheim

Ronald Wertheim, Arbitrator

The partial dissent of John Farmakides, Arbitrator, is as follows:

NOTE: Citations to the parties' proposed findings of fact and conclusions of law will be abbreviated as "F&C" or "Reply F&C."

1. 17 U.S.C. Sec. 111(d)(3), as amended, Pub. L. 103-198, 107 Stat. 2304 (1993).

2. There is a slight discrepancy between this figure and the number of Form 3 systems previously referred to due to a difference in data bases. JSC Ex. 2 at 4.

3. JSC Ex. 2 at 5, Table 3-2.

4. JSC Ex. 4 at 50.

5. Tr. 10782-83.

6. Green written direct at 1.

7. Pub.L. 103-198, 107 Stat. 2304, 1993.

8. 59 Fed. Reg. 2551.

9. 59 Fed. Reg. 63025.

10. 59 Fed. Reg. 64714.

11. 60 Fed. Reg. 14971-76.

12. See, 37 CFR Sec. 251.72; 60 Fed. Reg. 58680.

13. 17 U.S.C. Sec. 802.

14. 37 CFR 251.53.

15. "Stipulation of the Parties on the Issues of Program Categorization and Scope of Claims," at 1.

16. 17 U.S.C. 802(c).

17. H. Rep. No. 1476, 94th Cong. 2d Sess. 97, reprinted in 1976 U.S. Code Cong & Admin. News 5659, 5712.

18. 1978 Cable Royalty Distribution Determination, 45 Fed. Reg. 63026, 63035.

19. Id.

20. 45 Fed. Reg. at 63035.

21. *Christian Broadcasting Network v. Cable Royalty Tribunal*, 720 F.2d 1295, 1313 (D.C. Cir. 1983).

22. See, e.g., 1982 Cable Royalty Distribution Determination, 49 Fed. Reg. 37653, 37655 (1984)("the total number of hours of categories of programming on distant signals provides limited guidance to a reasonable allocation of cable royalties.").

23. 45 Fed. Reg. at 63036.

24. 45 Fed. Reg at 63037.

25. 45 Fed. Reg. at 63036.

26. 57 Fed. Reg. at 15303.

27. See, e.g., 1978 Cable Royalty Distribution Determination, 45 Fed. Reg. 63026, 63035 (Tribunal concludes the harm caused to copyright owners by secondary transmissions of copyrighted works by cable systems is of material importance in the distribution of royalty fees); 1979 Cable Royalty Distribution Determination, 47 Fed. Reg. 9679, 9692 ("the harm test is of limited utility in allocating royalty fees among categories of claimants."); 1983 Cable Royalty Distribution Proceeding, 51 Fed. Reg. 12792, 12810 (gives Program Suppliers a "credit" for harm but finds nothing in the record to show any hard figures as to the degree of harm incurred).

28. 45 Fed. Reg. at 63035.

29. Id.

30. 47 Fed. Reg. at 9892.

31. 57 Fed. Reg. at 15302.

32. 45 Fed. Reg. 63026, 63036.

33. Id.

34. 1979 Cable Royalty Distribution Determination, 49 Fed. Reg. 20048, 20049 (1984); see also, 1989 Cable Royalty Distribution Proceeding, 57 Fed. Reg. 15286, 15288 (1992)(the Tribunal's goal in "allocating the fund among various program types is to 'simulate market valuation.'"); *NCTA v. CRT*, 724 F.2d 176, 182 (D.C. Cir. 1983)("The Tribunal confronts the arduous task of 'simulating the subtleties of the cable marketplace within a one-year decisionmaking period.'").

35. 772 F.2d at 939.

36. 720 F.2d at 1306.

37. *National Association of Broadcasters v. Copyright Royalty Tribunal*, 772 F.2d 922, 932 (D.C. Cir. 1985).

38. Lindstrom written direct, 1.

39. Lindstrom written direct, 1.

40. Lindstrom written direct 1.

41. Id.

42. Id.

43. Miller written rebuttal at 8.

44. Id.

45. Id.

46. Tr. 8102 (Lindstrom).

47. Id.

48. Id.

49. Id.

50. Id. at 2.

51. Id.

52. Id.

53. Id.

54. Id.

55. Id. at 5.

56. Id.

57. Id. at 6-7.

58. Tr. 8095 (Lindstrom).

59. Tr. 8097 (Lindstrom).

60. Tr. 8042 (Lindstrom).

61. Tr. 8044 (Lindstrom).

62. Tr. 8050-51 (Lindstrom).

63. Tr. 2854 (Lindstrom).

64. Tr. 8058 (Lindstrom).

65. Tr. 8096 (Lindstrom).

66. Tr. 8223 (Lindstrom).

67. Tr. 8194 (Lindstrom).

68. Tr. 8072 (Lindstrom).

69. Tr. 8073 (Lindstrom).

70. Lindstrom written direct, 10; Lindstrom amended written direct, 11-14.

71. Tr. 8210 (Lindstrom).

72. Tr. 8218 (Lindstrom).

73. Tr. 8126-28 (Lindstrom).

74. Tr. 8126-29 (Lindstrom).

75. Kessler written direct, 3.

76. Kessler written direct, 3-4.

77. Kessler written direct, 5.

78. Tr. 3730 (Sieber).

79. Sieber written direct at 1.

80. Sieber written direct at 1.

81. Sieber written direct at 2.

82. Sieber written direct at 2.

83. Sieber written direct at 7.

84. Sieber written direct at 8.

85. Sieber written direct, 7.

86. Sieber written direct at 7.

87. Sieber written direct at 7.

88. Sieber written direct at 12-13.

89. Tr. 3750 (Sieber).

90. Sieber written direct at 13.

91. Sieber written direct at 13.

92. Tr. 4048-49 (Sieber).

93. Tr. 4023-24, 4048-49 (Sieber).

94. Tr. 4049 (Sieber).

95. Tr. 3751 (Sieber).

96. Tr. 3751 (Sieber).

97. Tr. 3751 (Sieber).

98. Tr. 3751-52 (Sieber).

99. Sieber written direct at 9.

100. Sieber written direct at 14.

101. Tr. 3767 (Sieber).

102. Tr. 3767 (Sieber).

103. Tr. 3767-8 (Sieber).

104. Tr. 3878 (Sieber).

105. Tr. 3877-78 (Sieber).

106. Tr. 3879 (Sieber).

107. Tr. 4039-40 (Sieber).

108. Tr. 4040 (Sieber).

109. Tr. 4040 (Sieber).

110. Tr. 4041-42 (Sieber).

111. Tr. 4044 (Sieber).

112. Tr. 4044 (Sieber).

113. Tr. 4105-06 (Sieber).

114. Tr. 4105-06 (Sieber).

115. Tr. 3875-76 (Sieber).

116. Tr. 11707 (Miller).

117. Miller written rebuttal at 4.

118. Miller written rebuttal at 4.

119. Miller written rebuttal at 4.

120. Miller written rebuttal at 4.

121. Miller written rebuttal at 7.

122. Miller written rebuttal at 7.

123. Miller written rebuttal at 7.

124. Miller written rebuttal at 7.

125. Miller written rebuttal at 7.

126. Miller written rebuttal at 8.

127. Miller written rebuttal at 8.

128. Miller written rebuttal at 8.

129. Miller written rebuttal at 8.

130. Miller written rebuttal at 8.

131. Tr. 6702 (Salinger).

132. Tr. 10880 (Scheffman).

133. Tr. 5936 (Engel).

134. Tr. 5850 (Fairley).

135. Tr. 9383, 9391-92, 9402, 9453-56, 9458-61, 9474 (Fairley).

136. Tr. 9400-01, 9403-04, 9421-22, 9425-28, 9439-40, 9484-86 (Fairley).

137. Tr. 11845-49 (Miller); Tr. 7923, 7953-54 (Ringold).

138. Tr. 624-26 (Bortz).

139. Tr. 1140 (Myhren).

140. Tr. 1972-78 (Ducey).

141. Statement of Dr. Richard V. Ducey at 9.

142. Statement of Dr. Richard V. Ducey at 9.

143. Tr. 1977 (Ducey); Statement of Dr. Richard V. Ducey at 9.

144. PS F&C at 141.

145. PS Reply F&C at 47.

146. See JSC Reply F&C at 8.

147. Dev. Reply F&C at 19.

148. JSC Reply F&C at 8.

149. NAB Reply F&C at 22-23.

150. PS F&C at 142.

151. PS F&C at 163.

152. PS F&C at 164-65, citing Lindstrom written direct at 12 (corrected).

153. PS F&C at 149.

154. PS F&C at 155.

155. JSC F&C at 100, citing JSC Ex. 39-X.

156. JSC F&C at 100, citing JSC Ex. 1-R.

157. JSC Reply F&C at 37.

158. PTV F&C at 87.

159. See JSC F&C at 113.

160. PS Reply F&C at 53.

161. See JSC F&C at 116.

162. PS F&C at 147.

163. See JSC F&C at 121.

164. PTV F&C at 86.

165. PTV F&C at 86; Dev. F&C at 43.

166. See JSC F&C at 114-15.

167. PS F&C at 144.

168. JSC Reply F&C at 47.

169. PS F&C 145-46.

170. Dev. F&C at 46.

171. JSC F&C at 145.

172. Dev. F&C at 35.

173. Tr. 11708 (Lindstrom).

174. Tr. 11710-11 (Miller).

175. Tr. 11708 (Miller).

176. PS F&C at 166.

177. Bortz direct testimony at 8.

178. Bortz direct testimony at 2.

179. Bortz direct testimony at 2.

180. Bortz direct testimony at 14.

181. Bortz direct testimony at 14.

182. See 57 Fed. Reg. at 15301.

183. JSC Ex. 3 at 13-22; Bortz direct testimony at 17.

184. 57 Fed. Reg. at 15301.

185. Tr. 768, 776 (Bortz).

186. 57 Fed. Reg. at 15300.

187. Bortz direct testimony at 21-22.

188. Tr. 955 (Bortz); Bortz direct testimony at 23.

189. Bortz direct testimony at 23.

190. Bortz direct testimony at 26.

191. Bortz direct testimony at 26.

192. Bortz direct testimony at 28.

193. Bortz direct testimony at 30.

194. Bortz direct testimony at 30.

195. Bortz direct testimony at 48-49.

196. Bortz direct testimony at 34.

197. Tr. 522 (Bortz).

198. Tr. 541-44 (Bortz).

199. Tr. 590-91 (Bortz).

200. Tr. 591 (Bortz).

201. Tr. 742 (Bortz).

202. JSC Ex. 3 at 40.

203. JSC Ex. 3 at 39.

204. JSC Ex. 3 at 39.

205. JSC Ex. 3 at 39.

206. JSC Ex. 3 at 40.

207. JSC Ex. 3 at 40.

208. JSC Ex. 3 at 40.

209. JSC Ex. 3 at 40.

210. JSC Ex.3 at 40.

211. Tr. 198 (Trautman).

212. Bortz direct testimony at 20.

213. Tr. 984 (Trautman).

214. Tr. 1058 (Trautman).

215. Tr. 11245-46 (Axelrod).

216. Tr. 2547-48 (Wildman).

217. Tr. 11331-32 (Scheffman).

218. Tr. 6700, 6776-77 (Salinger).

219. Salinger direct testimony at 7.

220. Statement of Paul J. Much at 7.

221. Tr. 2353-54 (Much).

222. Tr.2351 (Much); Statement of Paul J. Much at 4.

223. Statement of Paul J. Much at 3.

224. Tr. 2348 (Much); Statement of Paul J. Much at 3.

225. Tr. 2349-51 (Much).

226. Tr.2347 (Much); Statement of Paul J. Much at 3,5.

227. Tr. 2354, 2366 (Much); Statement of Paul J. Much at 5.

228. Tr. 2354 (Much).

229. Tr. 2444 (Much).

230. Tr. 2445 (Much).

231. Tr. 2457 (Much).

232. Frankel written rebuttal at 8.

233. Frankel written rebuttal at 4.

234. Frankel written rebuttal at 6.

235. Frankel written rebuttal at 6.

236. Frankel written rebuttal at 7.

237. Frankel written rebuttal at 7.

238. Woodbury written rebuttal at 28.

239. Woodbury written rebuttal at 15.

240. Woodbury written rebuttal at 19-20.

241. Woodbury written rebuttal at 21.

242. Id. at 20.

243. Woodbury written rebuttal at 22.

244. Woodbury written rebuttal at 22.

245. Rubin written rebuttal at 2.

246. Rubin written rebuttal at 2.

247. Rubin written rebuttal at 2.

248. Rubin written rebuttal at 4.

249. Rubin written rebuttal at 4.

250. Rubin written rebuttal at 8-9.

251. Rubin written rebuttal at 11.

252. Rubin written rebuttal at 11.

253. Rubin written rebuttal at 11-12.

254. Ford rebuttal testimony at 1.

255. Ford rebuttal testimony at 1.

256. Ford rebuttal testimony at 1.

257. Ford rebuttal testimony at 1.

258. Calfee written rebuttal at 2, 3, 9.

259. Tr. 2295-97 (Ducey).

260. See, e.g., JSC F&C at 144-45.

261. PTV F&C at 80.

262. See, e.g., JSC F&C at 96.

263. JSC F&C at 96, citing Tr. 2428 (Much).

264. PS Reply F&C at 2-3.

265. See JSC F&C at 95.

266. JSC F&C at 148.

267. PS Reply F&C at 58.

268. See JSC F&C at 149.

269. See JSC F&C at 150.

270. PS Reply F&C at 10.

271. PS F&C at 116.

272. NAB Reply F&C at 25.

273. PS F&C at 123-27.

274. JSC Reply F&C at 24, citing 57 Fed. Reg. at 15295.

275. PS F&C at 119-20.

276. See JSC Reply F&C at 26.

277. PS Reply F&C at 60.

278. Dev. Reply F&C at 17.

279. Dev. F&C at 44.

280. PS F&C at 134.

281. PS F&C at 135.

282. See JSC Reply F&C at 26-30.

283. PS F&C 120-21.

284. See JSC Reply F&C at 22.

285. PS Reply F&C at 62.

286. PS Reply F&C at 63, citing JSC Ex. 3 at 18.

287. PS Reply F&C at 63.

288. See JSC Reply F&C at 23.

289. PTV Reply F&C at 14-15.

290. PS Reply F&C at 59.

291. See JSC Reply F&C at 20.

292. Can. F&C at 94.

293. Can. F&C at 94-95.

294. Can. F&C at 95.

295. See JSC Reply F&C at 32.

296. Besen written direct at 3-27.

297. Tr. 3790 (Besen).

298. Besen direct testimony, Table 1; Tr. 3677-79 (Besen); PS F&C at 182.

299. Besen direct testimony at 24-26, Table 1; Tr. 3623 (Besen)

300. Tr. 3673-74 (Besen).

301. Besen direct testimony at 26-27; Tr. 3624-25 (Besen).

302. Besen direct testimony at 26-28, Table 2.

303. Tr. 6414, 6418 (Besen).

304. Besen direct testimony at 3-5; PS F&C at 168-69; PS Reply F&C at 38-39.

305. Crandall rebuttal testimony at 9-10; Salinger rebuttal testimony at 1, 14; Tr. 8836-37, 8842-43, 8861 (Crandall); Scheffman rebuttal testimony at 12-13; Tr. 10909, 11461, 11469 (Scheffman); Schink rebuttal testimony at 15.

306. Tr. 3661 (Besen).

307. Salinger rebuttal testimony at 5, 10; Tr. 8669-70 (Salinger).

308. Tr. 8810-11 (Salinger).

309. Tr. 8836-37, 8861 (Salinger).

310. PS Reply F&C at 40-41.

311. Crandall rebuttal testimony at 6-8; Schink rebuttal testimony at 1-2, 7, 10, 14; Tr. 9981-82, 10076 (Schink); Salinger rebuttal testimony at 4; Tr. 8656, 8695-96 (Salinger).

312. Tr. 6324-25 (Besen).

313. Tr. 10741-42 (Scheffman); 1979 Cable Royalty Distribution Determination, 47 Fed. Reg. at 9893.

314. PS F&C at 178-82; PS Reply F&C at 45-46.

315. See JSC Ex. 34-X.

316. Crandall rebuttal testimony at 11-13.

317. Tr. 3718 (Besen).

318. Crandall rebuttal testimony at 5-6, 13.

319. NAB 1990-1992 Ex. 5-X; 1989 Determination, 57 Fed. Reg. at 15290.

320. Tr. 6301-02, 6304-06, 6563 (Besen).

321. Dev. F&C at 38, 48.

322. PS F&C at 172.

323. JSC Reply F&C at 58-59.

324. Tr. 10092-93 (Schink).

325. PS Reply F&C at 42-43.

326. Schink rebuttal testimony at 1-2, 16-17.

327. Tr. 6453-54 (Besen).

328. Schink rebuttal at 13; Dev. Reply F&C at 48.

329. Tr. 9978-79 (Schink); Schink rebuttal testimony at 17.

330. Tr. 10012-13 (Schink).

331. Schink rebuttal testimony at 27-30.

332. See PTV Ex. 20 (revised).

333. Schink rebuttal at 26, 29.

334. Tr. 10107 (Schink).

335. Compare Lindstrom direct testimony at 10-18 with 57 Fed. Reg. at 15289-90.

336. See Crandall rebuttal testimony at 8.

337. Cooper written direct at 3.

338. P.S. Ex. ARC-1; Tr. 2822 (Cooper).

339. Tr. 2721 (Valenti).

340. Tr. 4317 (Green).

341. Tr. 4318 (Green).

342. Tr. 3218 (Green).

343. Tr. 4320-21 (Green).

344. Tr. 4321-22 (Green).

345. Tr. 4196 (Claster); Tr. 4858 (Thrall).

346. Tr. 4196 (Claster).

347. Valenti written direct at 1.

348. Tr. 2750-51 (Valenti).

349. Valenti written direct at 7-8.

350. Valenti written direct at 9-10.

351. Valenti written direct at 9-10.

352. Tr. 2727 (Valenti).

353. Valenti written direct at 10.

354. 57 Fed. Reg. at 15302.

355. Saperstein written direct at 1.

356. Saperstein written direct at 1.

357. Thrall written direct at 1.

358. Thrall written direct, 6.

359. Tr. 4862 (Thrall).

360. Thrall written direct at 10.

361. 57 Fed. Reg. at 15294, 15302.

362. Thrall written direct at 12-13.

363. Thrall written direct at 19-20.

364. Thrall written direct at 19.

365. PS F&C at 107.

366. PS F&C at 109.

367. PS F&C at 112, citing Tr. 1482 (Gerbrandt).

368. PS F&C 113-114.

369. PS F&C at 205, citing Sieber written direct at 16.

370. Sieber written direct at 18.

371. 1989 Cable Royalty Distribution Proceeding, 57 Fed. Reg. 15286, 15302 (1992)("Sports' result in [the viewing-to-time ratio analysis study] was so impressive, it went beyond any difference between the reach of superstations and the reach of regional stations.")

372. PS F&C at 206.

373. See JSC Reply F&C at 1.

374. JSC Reply F&C at 2.

375. NAB Reply F&C at 4.

376. NAB Reply F&C at 10.

377. PTV Reply F&C at 13.

378. PTV Reply F&C at 14.

379. PTV Reply F&C at 14.

380. See JSC Reply F&C at 62-63.

381. 57 Fed. Reg. at 15302.

382. Stern Statement at 2.

383. Maglio written direct at 9.

384. Maglio written direct at 9.

385. Mooney Statement at 2-3.

386. Mooney Statement at 13; Tr. 1298 (Mooney).

387. Mooney Statement at 11.

388. Tr. 1315 (Mooney).

389. Tr. 1315-16 (Mooney).

390. Tr. 3964-69 (Sieber); 1990 Tr. 2063-75 (B. Burns).

391. Mooney Statement at 5-7; Tr. 1259-62 (Mooney).

392. Tr. 1261 (Mooney).

393. Myhren Statement at 1; Tr. 1128 (Myhren).

394. Myhren Statement at 3.

395. Tr. 1146 (Myhren).

396. Tr. 1146-47 (Myhren).

397. Myhren Statement at 5.

398. Myhren Statement at 4.

399. Myhren Statement at 4.

400. Maglio Statement at 1-2.

401. Id. at 5.

402. Maglio Statement at 9.

403. Id. at 10.

404. Tr. 1844-45 (Maglio).

405. Tr. 1664 (K. Burns).

406. K. Burns Statement at 4.

407. Bortz Statement at 8-9; Tr. at 509-16 (Bortz).

408. Bortz Statement at 34.

409. Bortz Statement at 34.

410. 57 Fed. Reg. at 15301.

411. Stern Statement at 3.

412. Stern Statement at 11-12.

413. JSC Ex. 4.

414. JSC Ex. 4 at 27-29.

415. JSC Ex. 4 at 30.

416. JSC Ex. 4 at 27-29.

417. JSC Ex. 4 at 54.

418. JSC Ex. 4 at 54; Tr. 1491-99 (Gerbrandt); PS Ex. 25-X.

419. Tr. 1478 (Gerbrandt).

420. JSC Ex. 4 at 50.

421. JSC Ex. 2 at 9-11.

422. JSC Ex. 2 at 9-11.

423. JSC Ex. 2 at 12-16.

424. JSC Ex. 2 at 12-16.

425. Tr. 3974 (Sieber).

426. Tr. 3974-75 (Sieber).

427. Tr. 3975 (Sieber).

428. Stern Statement at 4, 13; Tr. 119-20 (Stern).

429. Bortz Statement at 35.

430. Bortz Statement at 35.

431. Bortz Statement at 35.

432. JSC F&C at 151, citing 57 Fed. Reg. at 15301.

433. JSC F&C at 151-52.

434. JSC F&C at 152-53.

435. JSC F&C at 153.

436. JSC F&C at 153.

437. JSC F&C at 155.

438. See, e.g., 1989 Cable Royalty Distribution Proceeding, 57 Fed. Reg. 15286, 15288.

439. JSC F&C at 155.

440. JSC F&C at 155-157.

441. PS F&C at 207.

442. PS F&C at 208.

443. JSC Reply F&C at 67.

444. PS F&C at 210.

445. PS F&C at 208.

446. JSC F&C at 66.

447. PS F&C at 208-09.

448. JSC Reply F&C at 67-68.

449. PS F&C at 211.

450. JSC Reply F&C at 69.

451. PS Reply F&C at 15.

452. PS Reply F&C at 15.

453. PS Reply F&C at 31.

454. PS F&C Reply at 35.

455. PS Reply F&C at 35.

456. Tr. 2654-56 (Chang); NAB 1990-92 Ex. 36.

457. Tr. 2662 (Chang).

458. Tr. 2657 (Chang).

459. Tr. 2323 (Ducey); Statement of Dr. Richard V. Ducey at 18; Tr. 3751 (Sieber); NAB 1990-92 Ex. 3.

460. Rebuttal Statement of Richard V. Ducey at 3.

461. Rebuttal Statement of Richard V. Ducey at 3.

462. Rebuttal Statement of Richard V. Ducey at 5.

463. 57 Fed. Reg. at 15302, 15303.

464. Tr. 1972-73; 2128-29 (Ducey).

465. Tr. 1972-78 (Ducey); Statement of Dr. Richard V. Ducey at 9.

466. Statement of Dr. Richard V. Ducey at 9.

467. Statement of Dr. Richard V. Ducey at 9.

468. Tr. 1977 (Ducey); Statement of Dr. Richard V. Ducey at 9.

469. NAB 1990-92 Ex. 45-R.

470. Testimony of Robert P. Sieber at 10.

471. Tr. 3734-39 (Sieber); Testimony of Robert P. Sieber at 3-6; Tr. 1979-80, 2003-07 (Ducey).

472. Tr. 2003 (Ducey); NAB 1990-92 Ex. 4 at IV-12.

473. NAB 1990-92 Ex. 4.

474. Tr. 2005 (Ducey); Testimony of Robert P. Sieber at 4; NAB 1990-92 Ex. 4 at IV-12.

475. Tr. 1981-91 (Ducey); Statement of Dr. Richard V. Ducey at 10- 14.

476. Tr. 1982-83 (Ducey); Statement of Dr. Richard V. Ducey at 11; Tr. 10606-07 (Rubin).

477. Tr. 1983 (Ducey); Statement of Dr. Richard V. Ducey at 11.

478. Tr. 1984-85 (Ducey); Statement of Dr. Richard V. Ducey at 11; Tr. 10608, 10614 (Rubin).

479. Tr. 1983-84 (Ducey).

480. Tr. 10609 (Rubin).

481. Tr. 1990 (Ducey); Statement of Dr. Richard V. Ducey at 13.

482. Tr. 1989 (Ducey).

483. Tr. 1989 (Ducey); Statement of Dr. Richard V. Ducey at 13; Tr. 10622 (Rubin).

484. NAB 1990-1992 Ex. 5.

485. Tr. 2029, 2054-55, 2104 (Ducey); Statement of Dr. Richard V. Ducey at 35.

486. Tr. 2042-45 (Ducey); Statement of Dr. Richard V. Ducey at 35.

487. Tr. 285-87 (Lemieux); Testimony of Dr. Peter H. Lemieux at 27-29, Table 9-2.

488. Testimony of Dr. Peter H. Lemieux at 28, Table 9-2; Tr. 445-46 (Lemieux).

489. Tr. 2022-27 (Ducey); NAB 1990-92 Ex. 13.

490. NAB 1990-92 Exs. 7-33.

491. Tr. 2029-30 (Ducey).

492. Tr. 2038, 2047 (Ducey); Tr. 2482 (DeFranco); Statement of Dr. Richard V. Ducey at 36; NAB 1990-92 Ex. 42.

493. Tr. 1997-98, 2029-39 (Ducey).

494. Tr. 2014 (Ducey).

495. NAB F&C at 136-37.

496. NAB F&C at 162.

497. NAB F&C at 72.

498. See 57 Fed. Reg. at 15301-02.

499. NAB F&C at 154-59.

500. NAB F&C at 161-62.

501. NAB F&C at 162-63.

502. NAB F&C at 163.

503. PS F&C at 215.

504. PS F&C at 216, citing Program Suppliers Ex. 18-RX.

505. NAB Reply F&C at 12-13.

506. PS F&C at 217.

507. NAB Reply F&C at 14.

508. PS F&C at 219.

509. PS F&C at 220-21.

510. PS F&C at 221.

511. PS F&C at 222-23.

512. PS F&C at 223.

513. NAB Reply F&C at 18.

514. PS F&C 224-26.

515. Fuller at 10; PTV Ex. 23; Tr. 5148-49 (Fuller).

516. Lawson at 1,16; Tr. 4646-47 (Lawson); Tr. 5386 (Downey).

517. Tr. 5407-08, 5412, 5415, 5426 (Downey); PTV Ex. 43.

518. Lawson at 7; Tr. 4669-72, 4675-78 (Lawson).

519. Tr. 4716-77 (Lawson).

520. Fuller at 15-16.

521. Tr. 1209-11 (Myhren); Tr. 2247-48 (Ducey); Tr.5173-74 (Fuller); Tr. 7050, 7052 (Howe); Tr. 7152-53 (Fournier).

522. Trautman at 31-32, 36-37; Bortz at 24-26, 31.

523. 57 Fed. Reg. at 15299-30; Fairley at 2-3.

524. Fairley at 6-10; Tr. 5738-72 (Fairley).

525. Tr. 606, 615, 657 (Bortz).

526. Tr. 969-71 (Trautman).

527. Fuller at 8; PTV. Ex. 22.

528. Tr. 459-61 (Lemieux).

529. Fuller at 20-24; Tr. 5189-90 (Fuller).

530. Fuller at 24-28; Tr. 5193-99 (Fuller).

531. Fuller at 5-6; Tr. 5125 (Fuller); PTV Ex. 21 (2d Rev.).

532. PTV F&C at 92.

533. 57 Fed. Reg. at 15303.

534. PS F&C at 226-31; PS Reply F&C at 68-81.

535. Tr. 9512, 9516 (Larson); PTV Ex. 5-R-X, 6-R-X.

536. Tr. 1758-59 (Gerbrandt).

537. 57 Fed. Reg. at 15303.

538. Can. Reply F&C at 33.

539. See 57 Fed. Reg. at 15300.

540. Tr. 590-97 (Bortz).

541. Tr. 6073-75, 6142 (Clark).

542. Dev. Ex. 7.

543. Dev. Ex. 1, p.3; Dev. Ex. 2, p.3.

544. Dev. Ex. 1, p.1.

545. Dev. Ex. 3, p.2; Tr. 6059 (Clark).

546. Tr. 6583 (Robertson).

547. Tr. 6065-66; 6196-97.

548. Dev. Ex. 8.

549. Dev. Ex. 1-R, pp. 5-7.

550. Tr. 6926, 6931-36.

551. Dev. Ex. 7, p.5.

552. Dev. Ex. 3, p.9.

553. Dev. Ex. 1, p.6.

554. Dev. Ex. 6, p.6.

555. Dev. F&C at 43.

556. Dev. F&C at 50.

557. Dev. F&C at 51.

558. Dev. F&C at 52.

559. Dev. F&C at 54.

560. Dev. F&C at 55, quoting, 57 Fed. Reg. 15286.

561. Dev. F&C at 56.

562. See, e.g., PS F&C at 231-32.

563. See, e.g., PS F&C at 235.

564. See, e.g., PS Reply F&C at 83.

565. See, e.g., PS F&C at 236-39.

566. See, e.g., PS F&C at 240.

567. de Freitas written direct at 2.

568. de Freitas written direct at 1.

569. Howe Direct at 3.

570. Howe written direct at 4; Tr. at 7025 (Howe).

571. Howe written direct at 4; Tr. at 7048 (Howe).

572. Howe written direct at 4-5; Exhibit CDN 2-C.

573. Bedard written direct at 2.

574. Tr. 7616 (Bennett).

575. Tr. 7636 (Bennett).

576. Bennett Direct at 2; Exhibit CDN 6-B.

577. Id.

578. Exhibit CDN 1-B; Exhibit CDN 6-F.

579. Calfee Rebuttal at 2.

580. Calfee Rebuttal at 10.

581. Exhibit CDN 6-D.

582. Bennett Rebuttal at 1.

583. Exhibit CDN R-1-A.

584. Tr. 7672 (Ringold).

585. Tr. 7671 (Ringold).

586. Ex. CDN 7 (Ford/Ringold Study) at 3.

587. Exhibit CDN 7 (Ford/Ringold Study) at 3.

588. Exhibit CDN 7 (Ford/Ringold Study) at 2, 10.

589. Exhibit CDN 7 (Ford/Ringold Study) at 14, 15.

590. Exhibit CDN 7 (Ford/Ringold Study) at 31.

591. Ex. CDN 7 (Ford/Ringold Study) at 4, Table 2.

592. Exhibit CDN 7 (Ford/Ringold Study) Tables 2, 7.

593. Ex. CDN 7 (Ford/Ringold Study) Tables 1a, 7a.

594. Tr. 7520-23 (Bennett).

595. Can. F&C at 76.

596. Can. F&C at 88-89.

597. Can. F&C at 96.

598. Can. F&C at 86.

599. 51 Fed. Reg. at 12813.

600. Can. F&C at 88-94.

601. Can. F&C at 90.

602. PS F&C at 241, citing Tr. 7521-23 (Bennett).

603. PS F&C at 246-48.

604. PS F&C at 244-45.

605. Can. Reply F&C at 14.

606. PS F&C at 248.

607. PTV F&C at 49.

608. PTV Reply F&C at 21.

609. PTV F&C at 50.

610. 51 Fed. Reg. 12792, 12814.

Dissent in Part Re: Copyright Arbitration Royalty Panel Cable Royalties for the Years 1990-92

While I agree generally with the opinion of the majority, I can not accept the findings made on several key issues and, accordingly, I must dissent in part.

In summary, I differ as to three principal matters: I am persuaded that the Bortz survey is the best tool available for measuring relative values in the relevant marketplace and that it should receive far more weight than it does; I am not as concerned with the supply side aspects of the marketplace; and I find the direct cases of two of the claimants to be more persuasive and deserving of a greater share than that allocated.

As to the structure of the Bortz survey and its methodology, it seems clear to me that it focuses correctly on the cable operator as the key player, asks the economically significant question and accurately provides the best estimates of relative value in the marketplace that actually existed. In having to make programming choices that directly impact on the ability of the cable system to stay in business, the cable operators are required to evaluate programming on a routine, full-time, professional basis. This constant exposure enables them to answer questions involving both programming and a constant sum budget on relatively short notice, and to recall the choices made without difficulty.

Most of the expert witnesses who testified agreed that the Bortz survey was correctly designed and executed and whatever shortcomings it may have are relatively minor in comparison to its attributes. In response to suggestions and official Tribunal criticism over the years, it has evolved to measure the correct variable and to provide the most accurate results of relative marketplace value.

As we all agree, the Neilsen study, on the other hand, is specifically designed to measure viewing, not value. It is a useful tool for considering the "advertising" ingredient since most of the funds that underwrite the cost of all broadcast stations, superstations, independents and network affiliates alike, stem from advertising revenue. Viewing data is important as a means for providing needed perspective, and from which an indirect showing of "value" may be inferred, but it hardly supports the allocation requested by the Program Suppliers; especially in view of the technical issues and criticisms raised both as to the people-meter data and to the Dr. Besen regression study. Certainly, I agree with my colleagues that viewing has an impact on value, but the evidence in the record quantifying this point is far from persuasive. In the final analysis it is a question of judgment as to how much weight should be accorded to the viewing data, how it correlates with value, and how best to consider it in an attempt to be as fair as possible to all the parties involved.

As to the matter of the "supply side" of the relevant marketplace, I am not persuaded that this factor deserves the importance it has received. First, I believe that the careful structure of the compulsory license itself plays a significant role in helping to define the marketplace, including the supply side. Further, I concur with the opinion of those witnesses who testified that the supply side of the marketplace is best likened to a "forced sale situation": there is no need to look at a sellers motivations or to speculate about the price that sellers would demand in a hypothetical market. Moreover, because of the relative insignificance of the market for distant signals compared to the market for all cable programming, even if the supply side is taken into account no significant adjustment is necessary.

I differ, too, from the majority in that I find the direct cases of two of the claimants to be more persuasive and deserving of a significantly greater share than that allocated. Specifically, I refer to the Devotionals and to the NAB.

The Devotional claimants emphasize the need by cable operators to diversify their program mix in order to attract and retain subscribers. This places a key, critical importance on "niche" programming, which they clearly provide. They also show that viewers of religious programs have an unusually intense interest and loyalty in this type of programming. Their avidity factor is significantly high. One witness testified that the Devotional programming was in some respects much like that of sports programming: both are live, timely and first run. He noted that they present "live drama": wherein the message of ministers is substituted for the play of athletes.

Likewise, the testimony presented by the NAB provides persuasive evidence, in my opinion, that distant signal news and public affairs programming was especially important during the period 1990 through 1992. The high avidity enjoyed by news programming and the instrumental viewing of this type of programming during this period, show its high value relative to the other available programming. So, too, substantial evidence was presented to show that station-produced programs, such as CNN programming or the diverse evening news shows, establish strong, almost personal attachments to news shows and to news anchors and clearly elevate this type of programming to a high value above the actual viewing provided. It is this higher level of relative value which justifies a higher allocation of shares from that made by my fellow panel members.

In conclusion, while I assign the Bortz results greater weight, nevertheless in making a judgment on a final allocation to be made to a specific party, the need to evaluate and consider whatever additional clarification and support is presented by that party or provided in the record is fully recognized, including whatever value may be discerned from the viewing data. Based on the evidence of record, a fair and reasonable allocation of the royalties collected in the three relevant years in the Basic Fund should be made and distributed as follows:

Program suppliers	50.2
Joint Sports	30.5
NAB	9.5
PTV	5.8
Devotionals	3.0
Canadians	1.0

The Canadians share for the year 1990 should be distributed on a pro-rata basis to the other five claimants.

While not much evidence was presented on the 3.75% Fund, it is uncontroverted that 3.75% signals are relatively expensive and that their carriage by superstations increased over the relevant time period. Almost 4/5ths of the total funds received in the 3.75% Fund derive from payments made by the superstations. It is also apparent that these signals are selected by the cable operators to be carried only where real value is clearly discerned. It seems clear, furthermore, as one witness testified, that sports is an extremely valuable asset that a cable operator looks for in carrying a superstation. Such factors, argue the JSC, point to the relative value of sports as greater in this 3.75% Fund than it is in the Basic Fund. Finding little evidence to the contrary, I agree. Therefore I would allocate the 3.75% fund for each of the three years as follows:

Program suppliers	48.8
Joint Sports	38.5
NAB	9.5
PTV	0.0
Devotionals	3.0
Canadians	0.2

The Canadian share for 1990 should be allocated pro-rata among the other four participating claimants.

Respectfully submitted,

John B. Farmakides
CARP Panel Member

Certificate of Service

I hereby certify that on Tuesday, February 13, 2018 I provided a true and correct copy of the 1990-92 CARP Report (May 31, 1996) (JSC 00002361-JSC 00002536). to the following:

Spanish Language Producers, represented by Brian D Boydston served via Electronic Service at brianb@ix.netcom.com

SESAC, Inc., represented by John C. Beiter served via Electronic Service at jbeiter@lsglegal.com

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Canadian Claimants Group, represented by Lawrence K Satterfield served via Electronic Service at lksatterfield@satterfield-pllc.com

Joint Sports Claimants, represented by Robert A Garrett served via Electronic Service at robert.garrett@apks.com

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Devotional Claimants, represented by Benjamin S Sternberg served via Electronic Service at ben@lutzker.com

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National Public Radio, Inc. (NPR), represented by Gregory A Lewis served via Electronic Service at glewis@npr.org

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Signed: /s/ Lucy H Plovnick